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SENSEMAKING IN ENTREPRENEURIAL VENTURES

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Declaration of prior work

This thesis is submitted to the University of Warwick in support of my application for the Degree of Doctor of Philosophy. It has been composed by myself and has not been submitted in any previous application for any degree. The work presented (included data generated and data analysis) was carried out by myself and the following paper which was co-authored by myself during the period of the PhD is referred to in the thesis as relevant literature.

Ucbasaran D *et al.* (2013)

Life after business failure: The process and consequences of business failure for entrepreneurs
Journal of Management 39: 163-20

Abstract

In this thesis, I examine the socio-cognitive processes of sensemaking in entrepreneurial ventures, through observing the language and behaviour of board directors in such ventures. Entrepreneurial ventures often require venture capital as a source of finance and the venture capitalist often places a non-executive director, termed an investor director, on the board of the venture to primarily look after their interests. Although there are many minor deviations from the business plan over time, substantial adverse deviations from plan also occur, which if not addressed, have the potential to jeopardise the survival of the business. These more substantial deviations from plan may invoke the investor directors to consider changing the direction of the venture, which is an ideal setting in which to study sensemaking because there is a need for the venture's stakeholders, whom the board of directors represent, to seek new understanding of the change. Processes such as sensemaking and sensegiving involve observing and interpreting individuals and groups of homogeneous actors, and in the context of entrepreneurial ventures, this has yet to be considered involving the constructions and accounts of such actors constituting the board of directors. My study calls for a qualitative method, like previous studies in this area, with the potential to compare situations across similar case studies of comparable organisations, and hence I obtained longitudinal data through semi-structured interviews and desk research over thirteen years from archival, historical and real-time field observations from board directors to observe how board processes unfold over time. In total, six sensemaking episodes were selected where the companies adversely deviated substantially from the warranted business plan. The decisions that followed each sensemaking episode were varied; two episodes were followed by consensual board decisions, two episodes were followed by forced board decisions whereby some board members disagreed or agreed reluctantly to support the board decision, and two were followed by protracted indecision, resulting in board paralysis and eventual company failure. From this empirical study, I present new processes with discrete phases for both encapsulated and open sensemaking; the two types of sensemaking observed from the empirical data. I argue that the use of economic capital and power dynamics used during encapsulated sensemaking may be antagonistic to consensual decision-making and these findings run counter to the traditionally held view that sensemaking assists in moving chaotic situations to a more ordered environment and one in which sensemaking unfolds in a manner which progressively increases the likelihood of venture failure, suggesting that not all sensemaking is positive. In understanding the various phases, I present relationships between actors' social positions and their sensemaking in entrepreneurial ventures and consider the effects of sensemaking, power and the mediation skills of the Chair on the strategic decision-making outcomes of the sensemaking process.

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Notes: Tables 7.1 and 7.2 and Figures 7.1 - 7.3 are included in Chapter 7 which consolidates my research findings and are duplicates of Tables & Figures presented in the empirical Chapters 4 - 6. The dates of the figures are relevant to the timing of the research undertaken, archival data from 2000 - 2013 and interview data from 2009 – 2013.

CHAPTER 1: INTRODUCTION

1.1 Entrepreneurial ventures

An entrepreneurial venture typically starts with a founder or founders who have an idea (Byers, Dorf & Nelson, 2010). During the initial stage of growth, founders either use their finance or may obtain finance from friends and family, and then seek external finance at a later stage in the form of venture capital (Cox, Katila & Eisenhardt, 2012). When external investment is obtained, boards appoint further directors to represent the interest of the new investors (Bagley & Dauchy, 2008). As the board size increases after progressive investment rounds, the proportion of outside directors also increases (Lerner, 1995). Although it is more usual for an outside investor to appoint an investor director, not all make such appointments (Kaplan & Stromberg, 2003) and further non-executive directors (of which investor directors are a subclass) may be appointed due to their market, competitor or technical knowledge (Bagley & Dauchy, 2008). These boards include entrepreneurial managers (initially idea-conceiving founders and, later, owner managers), investor directors, possibly independent non-executive directors and the Chair. Such boards come together to work as effective teams, co-ordinating ideas, commercial goals and strategies, to make decisions that direct the company in achieving its vision, mission and goals. My research objectives and main motivation lie around how entrepreneurial ventures can effectively respond to partial failure, in the form of adverse deviations from the business plan. When external investors buy equity in a business, the entrepreneurial managers often have to provide assurances by warranting certain statements, for example that the intellectual property is owned by the company or that certain financial statements are reasonably stated, resulting in a warranted business plan. Adverse deviations occur when such warranties are breached. These adverse deviations, which if not addressed, have the potential to jeopardise the survival of the

business which could cause the investors, through the investor directors (their board proxies) to challenge the company direction, creating the need for the board directors, individually and as a board, to make sense out of the new situation. Sensemaking is the most appropriate theoretical lens to consider this research objective as an underlying theory and is further considered below.

1.2 Sensemaking

In this thesis, I seek to examine the socio-cognitive processes of sensemaking in entrepreneurial ventures. I do so because entrepreneurial ventures are characterized by uncertainty, promoting the need for the venture's stakeholders to engage in sensemaking as a precursor to action. The specific aims of this research are to understand the individual phases of the sensemaking process, to assess the effect of faultline activation and strength on sensemaking and the subsequent establishment of patterns between sensemaking and outcomes in the form of decisions made or decisions delayed. In this Introduction, I consider the context of my work; gaps in the literature and a plan to address such gaps; the challenge of defining sensemaking and its components; and, finally, a structure of the thesis to provide an overview of the research.

1.3 Context

Sensemaking is context-specific (Weick, 1993) and my context is the observation of directors in the board meetings of entrepreneurial ventures where strategic decisions are considered. This research commences at the individual actor level with individual board members, and leads to the consideration of team dynamics within the board, with an emphasis on the influence of power and the role of mediation by the Chair of the board. I observe two types of sensemaking, encapsulated and open sensemaking, described in sections 1.5 and 1.6. This work is needed to both inform the existing sensemaking literature and to assist board members in making better and timely strategic board decisions.

1.4 Gaps in the literature

In a review of the sensemaking literature, Maitlis & Christianson conclude:

There are significant gaps in research at the team level, with fewer studies of team sensemaking in general, and especially research examining the relationship between sensemaking and key team processes, such as coordinating, decision-making and strategizing (2014, 108).

This is directly relevant to my research within the context of venture capital backed entrepreneurial ventures which are governed by boards of directors (hereafter boards for short). While entrepreneurs and investors have received considerable research attention separately, limited research has considered them as subgroups comprising the decision-making body of an entrepreneurial venture (Lim *et al.*, 2013). There are further gaps in the literature, which this research aims to address.

Firstly, the literature on sensemaking and failure has tended to focus on entrepreneurs' sensemaking about failure. In doing so, the focus has been on sensemaking after the terminal failure. I consider sensemaking and failure by looking at adverse deviations from the business plans, with the hope of mitigating the risk of failure. Such deviations are part of the journey of the entrepreneurial team and are downside surprises akin to an unexpected drop in sales, which the investors have the right to investigate and, if they wish, respond to by making changes to the company. These deviations can be business critical and if left unchallenged, may result in partial or total failure. I observe the board dynamics through the period of deviation by interviewing directors, observing board meetings and considering the decision-making process as mediated through the Chair of the board.

Secondly, the existing literature does not address the sensemaking of a broader range of stakeholders. To address this gap, I examine sensemaking from the perspective of

different stakeholders, both internal and external to the venture. The literature on sensemaking fails to address the socially negotiated processes of sensemaking, and how they may shape the unfolding of an event. By drawing on the work of Maitlis (2005) and others around the social processes of sensemaking, I explore these social dynamics and how they unfold in practice, in the context of venture capital backed entrepreneurial ventures. In particular I consider the heterogeneity of actors and whether they can be grouped to form subgroups that may act in concert to make sense out of often ambiguous and equivocal situations. In clarifying the sensemaking process, I also seek to address several issues raised by Sandberg & Tsoukas (2015) in their critique of the sensemaking literature. The widely-held view that sensemaking is social, retrospective, grounded in identity, ongoing and enacted, with the aim of reaching plausible accounts has remained largely unchallenged. Sandberg & Tsoukas (2015) level several criticisms at the extant sensemaking literature due to their treatment of or lack of consideration given to such issues. I concentrate on those issues that are relevant in answering the research question: How does the negotiated process of social interaction shape either the encapsulated or open sensemaking process in entrepreneurial ventures?, namely context, language, behaviour, politics and power. In doing so, I seek to understand the phases of the sensemaking process observed during the board meetings of entrepreneurial ventures, and the temporal relationships between these phases.

Thirdly, the literature on sensemaking has tended to be overly agentic, abstracting away from issues associated with the social structures that shape an actor's context. The literature on sensemaking fails to deal with the issue of context in terms of how it shapes stakeholders' cognitions. Drawing on the work of field theory, and particularly the work of Bourdieu (1977,1986,1988,1989,1990); I address this gap by exploring how the content of stakeholders' cognitions is shaped by their social position in a field. The use of encapsulated or open sensemaking may influence decision-making by boards in

entrepreneurial ventures (considered in Chapter 6) following numerous equivocal outcomes, hence it is appropriate to consider these forms of sensemaking in the context of this research, and the relationship of sensemaking to faultline activation and strength. In this regard, I am interested in the research questions: What is the nature of faultlines in entrepreneurial venture boards? And how do these faultlines affect the sensemaking processes? The inductive analysis of three entrepreneurial ventures suggests that the presence and nature (activation and strength) of faultlines may influence the type of sensemaking engaged by entrepreneurial venture boards. Faultlines are hypothetical dividing lines that split a group into two or more subgroups based on one or more individual attributes (Lau & Murnighan, 1998; Bezrukova *et al.*, 2009). However, in their review of the existing literature on faultlines, Thatcher & Patel suggest that:

One aspect of the original faultline conception that has largely been absent from the literature on faultlines is the idea of sensemaking. It is unclear how the sensemaking process is developed, reinforced or weakened through subgroup and group-level routines and exchanges (Thatcher & Patel, 2012 993).

An understanding of the formation and nature of faultlines, and their relationship to sensemaking processes, may help address the above gap in the literature. In Chapter 5 where faultlines are considered, I explain why it is necessary to use the three theories of sensemaking, faultlines and Bourdieu's theory of practice.

Fourthly, the literature on sensemaking does not address the issue of power in an explicit sense. In this research, I link dimensions of power to sensemaking components. Can encapsulated sensemaking become open sensemaking or can encapsulated sensemaking be averted at all through the control of power? If the Chair can control the use of power game initiatives and prohibit the negative progression of sensemaking components, this intervention may decrease the probability of failure.

Finally, the literature on sensemaking fails to address the socially negotiated processes of sensemaking, and how actors may shape the unfolding of a failure event. Drawing on the work of Maitlis(2005) and Maitlis & Lawrence (2007) around the social processes of sensemaking, I explore the social dynamics and how they unfold.

In the context of my work, Maitlis & Lawrence note (2007 58): *“Sensegiving has also been shown to be an important activity of board directors who shape both the content of company strategy and the processes through which it evolves, through such sensegiving activities as testing ideas, raising issues, and questioning assumptions”* (quoting McNulty & Pettigrew, 1999). I seek to understand how the homogeneous subgroups within a board context shape sense through sensegiving and come to an agreed course of action, or fail to reach a strategic decision.

I believe that in order to give due consideration to such issues, I need to thoroughly consider the effect of the process itself, with a focus on understanding the temporality of phases of the sensemaking process (Chapter 4); individual actors’ capital and disposition and the emergence of faultlines (Chapter 5); and finally, the outcomes of the process, as decision, indecision or no decision, with a focus on the influence of power, and the mediation role of the Chair (Chapter 6). I then condense my findings from the empirical data in Chapter 7.

1.5 Definition of sensemaking

A challenge for sensemaking scholars in researching research gaps is the proliferation of sensemaking components and the numerous definitions attached to these components. To meet this challenge, I consider these definitions.

Not only is there not a single definition of sensemaking, there is no single theory of sensemaking, which causes potential confusion if the terms are not appropriately defined within the research context considered. Sensemaking has grown in interest to scholars over the last two decades, stemming from the seminal work of Weick (1995) outlined in

his book “Sensemaking in Organisations”. Since that time, differing contexts and methodologies have not only added significantly to the literature, but have also led to differing opinions as to what sensemaking encompasses, how it is accomplished, its temporal orientation and the degree to which it is shared (Maitlis & Christianson, 2014). Differing contextualisation has led to differing definitions and emphasis; e.g. some scholars, including Weick himself, view the process as inherently social, discursive and retrospective (Weick, 1995; Maitlis, 2005; Weick *et al.*, 2005), whilst others consider it a more individualistic cognitive process (Louis, 1980; Starbuck & Milliken, 1988; Klein, Moon & Hoffman, 2006). This is further exemplified by the management-related database (ProQuest) identifying four thousand scholarly journal articles containing the word “sensemaking”, hence it is hardly surprising scholars use the term differently in different contexts.

Selected definitions of sensemaking (fifteen in total) are tabled in Maitlis & Christianson (2014 63-65), which illustrates the depth and breadth of the sensemaking literature reviewed in Chapter 2. These definitions can be differentiated as to whether sensemaking takes place within or between individuals, and whether sensemaking is more about developing frameworks allowing for definitions such as “*how people develop a vision or mental model of how the environment works*” (Hill & Levenhagen, 1995 1057) or, in contrast, whether “*sensemaking is a social process that unfolds in the social context of other actors*” (Weick *et al.*, 2005 409). Maitlis & Christianson (2014) argue for the derivation of an integrated definition which is also best suited to my research as it applies well to the context:

A process prompted by violated expectations, that involves attending to bracketing cues in the environment, creating intersubjective meaning through cycles of interpretation and action and thereby enacting a more

ordered environment from which further cues can be drawn (Maitlis & Christianson, 2014 11).

This definition is applicable because firstly, sensemaking is captured as a process unfolding as a sequence (Weick, 1995; Balogun & Johnson, 2004; Cornelissen, 2012). This is my observation induced from the empirical data and is further set out in Chapter 4, which explores the process of sensemaking. Secondly, the sensemaking process is triggered by cues in the form of violated expectations, which can be interpreted and explained from their environment (Maitlis, 2005). As stated earlier, in my research, such cues are adverse deviations from the business plan. Thirdly, sensemaking is social and attempts to “*produce, negotiate and sustain a shared sense of meaning*” (Gephart *et al.*, 2010 285). This aspect is seen in my research through actors negotiating to gain a consensus regarding their specific viewpoint in order to make a strategic decision during a period of uncertainty. Finally, the context includes an environment where “*sensemaking creates rational accounts of the world that enable action*” (Maitlis, 2005 21). In the context of my research, action is required to produce a new company direction with regained goal congruence.

1.6 Sensemaking components

The ability to make sense of adverse deviations from the business plan and take appropriate subsequent decisions are further complicated in venture capital backed entrepreneurial ventures due to the existence of multiple actors around the board table, whose interests may not be fully aligned and who may be associated with differing sensemaking accounts of the same event. Within the board, investor directors are often appointed by the investor to look after their interests. Entrepreneurial managers, who are senior managers within the company and who have the primary focus of adding value to the company, are appointed to the same board. The objectives of the investor directors may not always be aligned with those of the entrepreneurial managers where the investor

directors require an exit to realise their investment. This scenario has the potential to cause friction between the subgroups when they look to find meaning from their own group instead of searching for meaning from all subgroups, a process also known as members' encapsulation, which is typically defined as *"the process whereby group members are kept separate from non-members"* (Pratt, 2000 473). Sensemaking is a social process (Weick, 1993) and within the context of teams, members' encapsulation may occur due to presence of strong in-group bonds (Pratt, 2000).

When sensemaking is encapsulated, members engage with other members in the same subgroup to construct frameworks that they use to understand social stimuli. Such encapsulation can provide protection by buffering members from other members who do not join in with or who challenge their sensemaking of the environment (Griel & Ruby, 1983). In contrast to encapsulated sensemaking, open sensemaking occurs when there is little or no evidence of encapsulation, where subgroups of actors interact with other subgroups in their search for meaning. The use of encapsulated or open sensemaking may influence decision-making by boards in entrepreneurial ventures following numerous equivocal outcomes, and hence it is appropriate to consider these forms of sensemaking in the context of this research. As I am considering differing components of the sensemaking process, it is important to clearly state the components that have already been identified and use these consistently and as already defined in the extant literature.

Sensemaking component	Definition
Sensebreaking	The destruction or breaking down of meaning (Pratt, 2000 464)
Sensedemanding	Strenuous efforts to acquire and process information so as to establish “a workable level of uncertainty” and equivocality (Weick, 1969 40; Vlaar, van Fenema, & Tiwari, 2008 240)
Sense exchanging	Different conceptions of organization are negotiated to socially construct the identity of an organization (Ran & Golden, 2011 421)
Sensegiving	Attempting to influence the sensemaking and meaning construction of others toward a preferred redefinition of organizational reality (Gioia & Chittipeddi, 1991 442)
Sensehiding	Discourse can be mobilizing in terms of promoting a specific kind of thinking and action or manipulative in terms of hiding particular ideas (Vaara & Monin, 2010 6) or silencing alternative senses of integration or marginalization of particular voices (Monin <i>et al.</i> , 2013 262)
Sense specification	Specification of explicit or implicit norms, coining of principles, exemplary decisions and actions, symbolization, and quantification (Monin <i>et al.</i> , 2013 262)

Source – Maitlis & Christianson (2014 69) and Glossary (appendix 1)

Table 1.1: Definitions of sensemaking components in the extant literature

I specifically use the components of sensebreaking, sensegiving, and sensehiding in my research and accordingly use the definitions above. However, these components also require further consideration to place them in the context of use.

1.6.1 Sensegiving

Gioia & Chittipeddi define “sensegiving” as “a process of attempting to influence the sensemaking and meaning construction of others towards a preferred redefinition of organisational reality” (Gioia & Chittipeddi, 1991 442). There are many forms of sensegiving, ranging from the use of persuasive or evocative language (Dunford & Jones, 2000; Snell, 2002) to strategic conversations and storytelling. It may be that sensegiving is generalizable across other contexts and the sensegiving dynamics of directors on the board are observed in these case studies. Sensegiving can be triggered by the perception or anticipation of a gap in organizational sensemaking processes (Maitlis & Lawrence, 2007). Homogeneous groups of actors do not necessarily engage in sensegiving even around significant matters (Maitlis 2005) and before the work of Maitlis & Lawrence (2007), no research had been undertaken on the triggers of such sensegiving processes. In the context of my work, Maitlis & Lawrence (quoting McNulty & Pettigrew, 1999) note:

Sensegiving has also been shown to be an important activity of board directors who shape both the content of company strategy and the processes through which it evolves, through such sensegiving activities as testing ideas, raising issues, and questioning assumptions (2007 58).

I seek to understand how subgroups within a board context shape sense through sensegiving and arrive at an agreed course of action.

1.6.2 Sensebreaking

This sensemaking component has been defined as “*the destruction and breaking down of meaning*” (Pratt, 2000 464). Whilst this area has received less scholarly attention, it is nevertheless important because it can motivate actors to re-consider their sense, to question underlying assumptions and to re-examine courses of action. It is frequently seen as a precursor to sensegiving (although as an attempt to influence, may be within the definition of sensegiving), in which actors find meaning by filling a meaning void, created after breaking down meaning prior to this part of the process (Pratt 2000).

The intent of sensebreaking is to create a meaning void in the recipient, and to disrupt an individual’s sense of self. An example of this may occur in the training schemes of medical doctors or academics, where the initial years of training aim to demonstrate how little they know. Once they have been beaten down (Pratt, 2000 486), new sense is then introduced to them via new working practices.

It has been argued that organisational sensebreaking provides a complement to the concept of sensegiving and assists in the capturing of the destructive concepts of reorganising, which may have connections with unfreezing (Lewin, 1951) and unlearning theories (Pratt & Barnett, 1977). However, no work has been carried out on whether sensebreaking has the same effects if it is used intentionally compared to being used unintentionally. Pratt (2000) sets out a model of managing identification in which he suggests sensemaking is motivated through the use of sensebreaking tactics to create a meaning void. If members are not seeking (meaning), then they will either fail to identify or will ultimately de-identify with the organisation. Organisations can engage in a wide variety of sensebreaking procedures, namely practices identified in theories of socialisation (Van Maanen & Schein, 1979), commitment (Kanter, 1968), social influence (Cialdini, 1993) and identity conversion (Griel & Ruby, 1983); all of which attempt to affect members’ self-evaluation. In my study, I observe powerful board members e.g. investor

directors attempting to sensebreak after the trigger point of an adverse deviation through the discrediting of opinion from directors outside the investor director subgroup.

1.6.3 Sensehiding

In the study of mergers, Vaara & Monin (2010) show how the bigger picture become distorted or manipulated through holding back particular aspects of mergers, and they term this activity “*sensehiding*” (6). They link sensehiding to legitimization, suggesting mobilisation by promoting a specific kind of thinking in terms of hiding ideas. Such legitimization processes take place in numerous social contexts, e.g. experts playing a role in merger and acquisition justification or journalists reinforcing ideas or interpretation. In such activities sensehiding can play a pivotal and persuasive role.

In supplementing the above-mentioned sensemaking components, I introduce new components from my empirical work and include the components noted above in new processes to describe the sensemaking processes observed in my research.

1.7 Structure of thesis

1.7.1 Research project chronology and sequencing

I possess over three decades of experience at board level in the biotechnology industry, as CFO, CEO, Chair and non-executive director; and through this experience and board level access, I was able to source rich data, through interview and observation from all board members around the board table (considered further in Chapter 3). In order to consider the research questions in a scholarly context, whilst collecting the data and especially before further clarification of interviewee comments, I considered the extant literature and used an inductive-deductive loop, moving between data and literature numerous times. This loop methodology allowed me to gain an understanding of the gaps which were evident between the empirical observations and extant literature; and allowed me to seek answers to complete these gaps by aligning patterns and themes from the data to the literature or to inform the literature of new processes or models.

The thesis employs sensemaking theory throughout and all empirical Chapters consider research questions where sensemaking is promoted (Chapter 4 – the process of sensemaking in entrepreneurial ventures, Chapter 5 – sensemaking and faultlines in entrepreneurial ventures, and Chapter 6 – board outcomes from sensemaking within entrepreneurial ventures). In addition, each empirical Chapter employs supplementary theory which is relevant in order to answer the research questions considered in that Chapter (e.g. Chapter 5 employs faultline theory and Bourdieu's theory of practice, in addition to sensemaking theory, to consider the effect of faultlines on sensemaking in the context of entrepreneurial ventures). I have considered the supplementary theories which are relevant to a particular empirical Chapter within that Chapter, and sensemaking theory which is generic to the overall thesis within the literature review of Chapter 2. I have taken the same approach to my methodology. I have included specific methodology, pertinent to answering the research questions considered in each empirical Chapter, within the empirical Chapters themselves; and only generic methodology, pertinent to the thesis as a whole, within the methodology section of Chapter 3. I adopted this approach for ease of reading and to align methodologies with the data which were generated through the methodology, including the data coding tables for each data set. This further allowed for the iterative relationship between data and theory employing the inductive-deductive loop as outlined above.

I order my empirical Chapters in a manner that allows for the knowledge and data presented in the earlier Chapters to be made available to later Chapters. This is necessary in providing a framework on which to build the story. My first empirical Chapter considers the processes of sensemaking in the context of entrepreneurial ventures, which need to be unpacked, prior to the consideration where any antecedents or outcomes are considered. The relationship of antecedents and outcomes to the

processes can then be sought, which I consider in Chapter 5 (antecedents) and Chapter 6 (outcomes) respectively.

1.7.2 The overall structure of the thesis

In Chapter 2, I review the literature relating to sensemaking and then focus on the literature that applies sensemaking to entrepreneurial ventures. In Chapter 3, I outline the empirical context of the study, the biotechnology industry, and explain its suitability for a study of entrepreneurial sensemaking. I then continue to outline my method and data collection strategy. In Chapters 4, 5 and 6, I present my empirical analysis, which is centred around three main theoretical ideas. In Chapter 4, I examine how the negotiated process of social interaction between actors is shaped by either an encapsulated or open sensemaking process. In so doing, I explore how differences in social position affect the sensemaking process and consider the flow of information in shaping that process, which leads to new process schematics. In Chapter 5, I explore the relationship between an actor's social position and their sensemaking in entrepreneurial ventures. I build on faultlines work and show how context is shaped by the socio-cognitive processes of sensemaking. In Chapter 6, I examine how the sensemaking process in entrepreneurial ventures may lead to terminal failure. In contrast to the literature on entrepreneurial sensemaking that has examined the effects of failure on sensemaking, I look at the reverse, and consider the effect of sensemaking on the outcomes of the process. I consider two influences on the sensemaking process that may affect the speed of decision-making, that of the mediation of the Chair of the board and the influence of power. Finally, in Chapter 7, I synthesize the findings of the three empirical Chapters and explain my contribution.

CHAPTER 2: LITERATURE REVIEW ON SENSEMAKING

In this Chapter, I review the literature relating to sensemaking, and then focus down on the literature that applies sensemaking to entrepreneurial ventures. In doing so, I explore the main issues in sensemaking, and the gaps in our knowledge.

2.1 Sensemaking theory

Sensemaking can be traced back to the end of the 19th century (James, 1890) and has remained dominant in the organisational literature after becoming an accepted topic in the 1960's (Garfinkel, 1967; Weick, 1969). Garfinkel used an ethnomethodological approach to consider how actors account for their sense of reality (Garfinkel, 1967) and Weick used rich case studies of crises to gain understanding of the assembling of order from chaotic catastrophic events (Weick, 1990, 1993). As well as positive sensemaking, the concept of negative sensemaking (sensemaking that even precipitates crises) has also been put forward in the mainstream literature (Abolafia & Kilduff, 1988; Weick, 1988). The ideas that inform sensemaking theory are rooted in social psychology (e.g. Festinger) micro-sociology (e.g. Goffman) ethnomethodology (e.g. Garfinkel) social constructionism (e.g. Berger & Luckman) and cultural anthropology (e.g. Geertz) all taken from the Sage Directory of Qualitative Management Research edited by Thorpe & Holt (2008). In the business world, the ideas provided a counter to the earlier prevailing assumption associated with the positivist orthodoxy in the field, challenging, among other things, the goal orientation of businesses, by suggesting organisational plans were retrospective reconstructions of elapsed actions. Sensemaking has now found its way into the more mainstream study of organisations, addressing issues such as middle management change as opposed to studies of more esoteric contexts such as fire-fighting and airplane flight decks. Weick suggests: *"What is unusual about the topic of sensemaking is that it is grounded as much in deductions from well-articulated theories, noting ethnomethodology and dissonance theory as it is in inductions from specific cases*

of struggles to reduce ambiguity" (Weick, 1995 13). I hope to inform the theory through collecting and analysing case study data from boards of entrepreneurial ventures.

As stated in the Introduction, I employ a broad definition throughout this thesis: "*A process prompted by violated expectations, that involves attending to bracketing cues in the environment creating intersubjective meaning through cycles of interpretation and action and thereby enacting a more ordered environment from which further cues can be drawn*" (Maitlis & Christianson, 2014 11). I adopt this definition because it allows for sensemaking that is triggered by adverse deviations, under the defined term "violated expectations" and allows for the observation of groups of heterogeneous actors who may be bracketing cues in differing ways. The recent review of sensemaking (Sandberg & Tsoukas, 2015) suggests that there has been surprisingly little critique of the sensemaking process. They point out that only a few researchers have critically engaged with the sensemaking process, to map its uses, inconsistencies, omissions and confusion (Gioia & Mehra, 1996; Engwall & Westling, 2004; Costanzo & MacKay, 2009). This review paper adopts the following definition of sensemaking: "*Sensemaking is now seen as a constructive process, which includes how people concerned with identity in the social context of other actors, engage ongoing events from which they extract cues and make plausible sense retrospectively while enacting more or less order into these ongoing events*" (Weick, 2001 463). This may ultimately be a better definition for the sensemaking observed in this study, however the above definition by Weick includes a process prompted by violated expectations, which relates well to adverse deviations from plan.

The view that sensemaking is social, retrospective, grounded in identity, ongoing, enacted and seeks to reach plausible accounts has been held for several years. A critique of some of these aspects is undertaken in the review (Sandberg & Tsoukas, 2015) and I refer to this review throughout the relevant sections of the literature review.

Sandberg & Tsoukas (2015) sets out the major constituents of sensemaking as viewed in 2015 summarised in Table 2.1, and further critique the commonly held views, addressed later in this Chapter. In the context of my study, adverse deviations that are business critical clearly would be major unplanned events (unplanned to the extent that they are not expected to happen) and it is these triggers I am looking for in my empirical data to commence mapping the process of sensemaking. Although Sandberg & Tsoukas define the process as creation, interpretation and enactment; earlier scholars map the process as scanning, interpretation and learning, resulting in action. These mapping techniques appear very similar in that scanning is a mechanism to create, interpretation is common to both maps and enactment and learning resulting in action relate to changes in ongoing practices. The outcomes of the process allow for all eventualities which indicate sensemaking may be not just around positive outcomes and the creation of order could create nonsense or no restored action. Certain factors influencing sensemaking may be more relevant than others in the context of entrepreneurial ventures, and I review these later as part of the literature review.

Events that trigger sensemaking	Process of sensemaking	Outcomes	Factors influencing sensemaking
Major planned events	Creation	Restored sense	Contexts
Major unplanned events	Interpretation	Restored action	Language
Minor planned events	Enactment	Nonsense	Identity
Minor unplanned events		No restored action	Cognitive frames
Hybrid of events			Emotion
			Politics
			Technology

Table 2.1: Major constituents of the sensemaking process

My study does not concentrate on the triggers themselves but on the process, antecedents and outcomes. I now consider the sensemaking process itself.

2.2 The sensemaking process

The sensemaking process is facilitated by the placement of stimuli (information) into sensemaking frameworks (schemata or knowledge structures), that reduces the complexity of the information (Sackmann, 1992; Walsh, 1995) and allow its association with past actions and meanings (Starbuck & Milliken, 1988; Weick, 1995). Sensemaking can be viewed as both an individual based and/or a corporate and collective based methodology (Gioia & Chittipeddi, 1991). Through the process of sensemaking, people enact and create the social world, through negotiated conversation, although there is a body of literature that suggests a more cognitive/individual approach to sensemaking, considered later in this Chapter.

Sensemaking can be constructed retrospectively, yet used prospectively, through the capturing of thoughts and emotions that may be useful to assist the interpretation of future events (Brown, Stacey & Nandhakumar, 2008). The sensemaking process consists of the dynamics of scanning, interpretation and learning (Weick, 1979; Gioia & Chittipeddi, 1991), and has been depicted as follows:

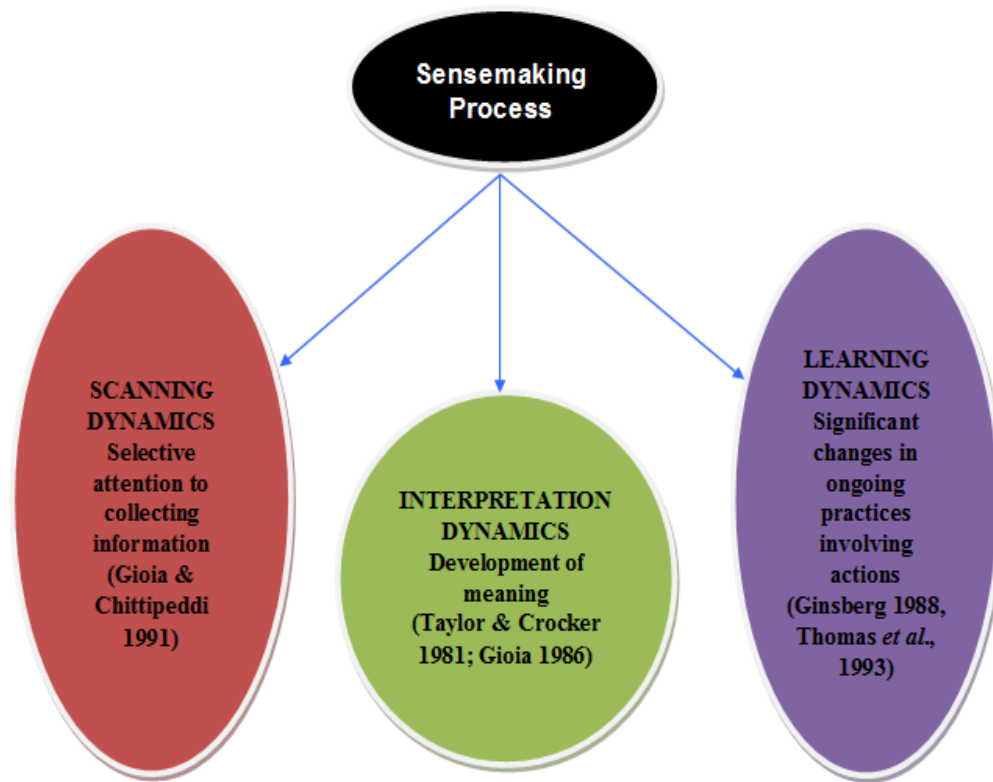


Figure 2.1: The sensemaking process

Scanning dynamics refers to the selective attention to, and collection of, information that might be important in the sensemaking process. Interpretation dynamics refers to the development of ways of comprehending the meaning of information into structures suitable for understanding and learning dynamics refer to any significant changes in ongoing practices through action.

2.2.1 Scanning dynamics

Scanning involves information gathering. Decision-makers typically have access to far more information than they need or can use (Mintzberg, 1983), so they need to be selective (Huber & Daft, 1987). Scanning is a search of the external environment in the attempt to identify anything that may affect an organisation (Daft & Weick, 1984) or the internal environment which may have an impact on future performance (Cowan, 2013).

2.2.2 Interpretation dynamics

Interpretation involves taking the scanned information and fitting it into some understanding through structure (Gioia, 1986). Some researchers have viewed this as a process that individuals use to ascribe meaning, whereas others view this on a collective basis (Bartunek, 1984). Meanings are often categorised into recognised labels, e.g. opportunities and threats (Dutton & Duncan, 1987). These labels could be broadly differentiated through the evaluation of an issue in positive or negative terms, whether it represents a gain or loss for an organisation and whether it is controllable or uncontrollable (Jackson & Dutton, 1988). The interpretation label often produces a direction of action (Dutton, Fahey & Narayanan, 1987) and this can affect risk levels, commitment and enactment. Extant research suggests even when exposed to identical stimuli, top managers in different organisations often construct different interpretations of the same issue (Lawrence & Dyer, 1983; Meyer, 1997). There has been debate whether interpretation is the appropriate process between scanning and learning dynamics (Weick, 1995: 13). Weick points out: *“Sensemaking is clearly about an activity or a process, whereas interpretation can be a process, but is just as likely to describe a product. It is common to hear that someone made an interpretation, but we seldom hear that someone made a sensemaking. We hear, instead, that people make sense of something, but even then, the activity rather than the outcome is in the foreground”* (1995: 13).

2.2.3 Learning dynamics

It is acknowledged that scanning strategies and subsequent interpretation of strategic information are pivotal precursors to actions taken, whether change actions or confirmatory actions (Pfeffer & Salancik, 1978). Such changes can be minimal, for example the change of the service of a product, or more significant, for example the change of overall business strategy.

2.3 Sensemaking properties and forms

Weick (1995 17-62) discusses in detail the seven properties of sensemaking in an organisational setting. These can be summarised as follows: social context (influenced by the actual, implied or imagined presence of others); personal identity (a person's sense of who he or she is in a setting); retrospect (perceived world is past hence things are visualised and seen before they are conceptualized); salient cues (picking up prompts from the surrounding environment); ongoing (experience is continuous however interruptions happen when sensemaking episodes are triggered); plausibility (sense constrained by agreement with others and consistent with one's own views) and enactment (action stemming from the sensemaking).

From my empirical work, I observed that in some episodes, all actors were fully engaged in the social context, whereas in other episodes, certain groups of actors formed their own social network, excluding others. I subsequently sought literature that would assist in forming a theoretical understanding and background to these observations. Where the social network was free and open to all the actors, I have deemed this type of sensemaking as "open sensemaking", as all actors are open to receive and give sense to each other. In contrast, there is a form of sensemaking that captures the restriction of social interaction to individual subgroups of actors, entitled "encapsulated sensemaking". The extant literature (Pratt, 2000) suggests that within the context of teams, social encapsulation results directly from the creation of strong in-group bonds in the presence of like-minded others at functions or in meetings. Members' encapsulation is typically defined as *"the process whereby group members are kept separate from non-members"* (473). When sensemaking is encapsulated, members engage with other members in the same subgroup to construct frameworks that they use to understand social stimuli. There are numerous ways that organisations can promote encapsulated sensemaking among members. The organisations attempt to manage intragroup relations through the

development of strong bonds between individuals and organisations (Lofland & Stark, 1965; Griel & Ruby, 1983), through mentoring (Hunt & Michael, 1983; Kram, 1983) and through organisational commitment (Buchanan, 1974).

Sensemaking forms can also be influenced by emotions (Maitlis & Christianson, 2014). Positive emotions are more likely to lead towards generative sensemaking; negative emotions are more likely to lead towards integrative sensemaking; self-conscious emotions such as pride and guilt lead towards social sensemaking and self-conscious emotions such as hubris and shame lead towards solitary sensemaking. These forms are compared by Maitlis, Vogus & Lawrence (2013) as follows: Firstly, *“generative sensemaking which involves a process in which relationships among cues and frames are constructed flexibly and creatively to allow for the development of new accounts”*(9). Secondly, *“integrative sensemaking is characterised by a heightened sensitivity to whether new cues are consistent or inconsistent with the emerging account of a situation, such that accounts are continuously and critically evaluated with respect to plausibility”*(9). Thirdly, social sensemaking relates to a person drawing on and engaging with others. *“We agree that sensemaking always occurs in a social context, affected by the rules and resources that define that context”*(12). Finally, solitary sensemaking precedes as solo activities, intentionally or unintentionally distanced from the sensemakers’ social context. *“The individual works to interpret and react to a sensemaking trigger largely alone or with an imagined other”*(12).

Sensemaking forms can also be defined by observing the dynamic between the leader and the stakeholders. Maitlis (2005) compared processes in which leaders were more and less active, to distinguish four different forms of organisational sensemaking processes: Firstly, *“guided sensemaking occurs when leaders are very energetic in constructing and promoting understandings and explanations of events, and stakeholders are also actively engaged in attempting to shape beliefs about certain*

elements of the issues”(35). Secondly, “fragmented sensemaking processes emerge when stakeholders raise issues, generate accounts of a situation, and argue for potential solutions in the context of leaders who do not try to organize or control discussions”(36). Thirdly, “restricted sensemaking results from leaders promoting overarching accounts of issues they encounter which stakeholders tend to accept with relatively few attempts to provide alternative understanding”(39). Finally, “a minimal sensemaking process is followed when both leaders and stakeholders await others’ interpretations of and reactions to an issue, which typically come in response to some external trigger”(42).

A further form of sensemaking is considered in 2016 where a multi-case analysis of nine “most trusted advisors” in six family run businesses is used to introduce “mediated sensemaking” – that is the social position, orientation, and actions used by mediators to facilitate adaptive sensemaking that unfolds when someone begins to doubt the sense already made (Strike & Rerup, 2016 880). This may be useful when I consider the Chair as a mediator in Chapter 6, and I further consider this literature in that Chapter.

It may be difficult to consider sensemaking in isolation of sensegiving, as the pattern of leader and stakeholder sensegiving in combination has been shown to shape the processes and outcomes of organizational sensemaking, or the process of social construction in which individuals attempt to interpret and explain sets of cues from their environments (Maitlis, 2005). Furthermore, sensegiving can be triggered by the perception or anticipation of a gap in organizational sensemaking processes (Maitlis & Lawrence, 2007). Homogeneous groups of actors do not necessarily engage in sensegiving even around significant matters (Maitlis, 2005) so that is why I have an interest in sensegiving as I am considering how heterogeneous groups of actors sensegive in their attempt to influence other groups of actors (e.g. investor directors and entrepreneurial managers).

2.4 Sensegiving

As stated in the Introduction, Gioia & Chittipeddi define sensegiving as “*a process of attempting to influence the sensemaking and meaning construction of others towards a preferred redefinition of organisational reality*” (Gioia & Chittipeddi, 1991 442). Research has observed sensegiving in the context of managers and staff in organisational contexts, where communication of new beliefs and meaning has been defined as sensegiving (Gioia & Chittipeddi, 1991; Gioia *et al.*, 1994; Labianaca, Gary & Brass, 2000; Fiss & Zajac, 2006). In the case of change management, managers embark on sensegiving either as a planned process (Gioia & Chittipeddi, 1991) or in response to sensegiving imperatives on occasions where staff relies on management to provide meaning during meaning voids (Corley & Gioia, 2004). It may be that sensegiving is generalisable across other contexts and the sensegiving dynamics of investor directors and other directors on the board are observed in this case study. Managerial sensegiving is deemed successful when its recipients are deemed to have constructed a shared interpretive scheme congruent with the goals of the manager, and this interpretation is transferable to the specifics of this case study where sensegiving would mean the board has constructed a shared interpretive scheme congruent with the goals of the investors.

A major limitation in the critique of sensemaking (Sandberg & Tsoukas, 2015) is that it does not allow for an investigation of differing kinds of prospective sensemaking, such as sensegiving which is deemed to be prospective (Gioia & Chittipeddi, 1991). Sandberg & Tsoukas (2015) point out two main problems:

The first problem is: “*Sensegiving is couched in terms of the conduit metaphor of communication whereby sense is something that is first made and then given to someone else*” (Lakoff, 1995 116). They contend that “*sense is not an object to be passed on but a skilful activity to be engaged in. A sensemaker and sensegiver are intertwined and a change agent who gives sense to employees has made sense out of sense given to him*

by other actors” (Lakoff, 1995 116). This suggests that sensemaking and sensegiving are so intertwined that one cannot be understood without the other. In this work, I have interest in observing from the empirical data the richness and depth of sensegiving as a fundamental part of understanding the sensemaking process and to consider how intertwined the processes are – are they in effect the same process?

The second problem is: *“Adding the notion of sensegiving to the existing sensemaking process does not seem enough to enable the investigation of more genuine forms of prospective sensemaking, such as strategic discussions about the future”* (Tsoukas & Shepherd, 2004; Stigliani & Ravasi, 2012; Kaplan & Orlikowski, 2013) or *“various forms of anticipation actors experience, while carrying out ongoing organisational activities”* (Bolander & Sandberg, 2013). The challenge thrown out by the authors in the review article (Sandberg & Tsoukas 2015) is that sensemaking processes’ retrospective nature may be somewhat limiting to further advancing sensemaking theory through including more genuine forms of prospective sensemaking. In this study, by empirically observing unfolding sensemaking episodes, it is hoped that further light can be shed on this important aspect of sensemaking theory.

In considering sensegiving, Sandberg & Tsoukas raise situational factors that do not merely happen to influence sensemaking efforts, but they in many cases are consciously used as resources to influence sensemaking. This has been shown to be the case in leadership studies (Smircich & Morgan, 1982; Pye, 2005) and in the areas of strategy and organisational change (Dunford & Jones, 2000). I now consider these factors and their relevance to my study.

Context. In particular in this empirical work, social context is considered using Bourdieu’s theory of practice, which seeks to unpack the social context in which individual actors come to the board table. The critique of Sandberg & Tsoukas (2015) concludes that further work is required on process as the notion remains vague, the concept of sense is

insufficiently developed, sensemaking overlooks larger contexts in which it takes place and sensemaking reduces reality to subjective understanding. This study takes these views into account when considering the empirical setting and in researching the process and outcomes of the sensemaking process.

Language: These linguistic features include discourse, narrative, rhetoric and storytelling (Morgan, 1980; 1986; 1993; Brown, 2005; Oswick & Christensen, 2008; Boudes & Laroche, 2009; Abolafia, 2010; Cornelissen, Heracleous & Jacobs, 2011; Cornelissen, 2012). The sensegiving in these initiatives enable actors to attempt at organising confusing cues and to give them some arrangement into more holistic and coherent interpretations of the episode. Metaphors connect human experience and guide interpretations. There may be an argument to suggest that the presentation of sensemaking episodes, if packaged through storytelling language, may assist both sensegiving and the attitudes of stakeholders. One of the assumptions of sensemaking theory is that the individuals, and in particular experts, are faced with copious information, making the world feel inherently complex and ambiguous. Some scholars have observed leader sensegiving as storytelling. Dunford & Jones (2000) observed senior managers narrating strategic change events in three organisations and Snell (2002) observed the president of an organisation used narrative to attempt a move to a learning organisation. Brown *et al.* (2008 1031) argue that the analysis of stories allows us to identify and to analyse what people agree on and where understandings differ. Narrative theorists argue that in order to counter ambiguity, stories are a fundamental tool by which humans communicate their insight to others and hence make sense of ambiguous situations, and act as both sensemaking and sensegiving devices to link cause and effect, both within and between different parts of the narrative (Gabriel & Bowling, 2004). Storytelling has a potential to aid the explanation of failure events, making any underlying actions at least understandable and at best maybe even favourable. Gabriel & Bowling (2004 64) assert

stories do more than just present facts as information. By presenting facts as part of a complex whole, not only are organisational stories more easily learned and remembered, a more comprehensive and memorable identity can be ascribed to firms. Gabriel & Bowling contend that this is likely to involve temporal sequencing and this can reposition the sensemaking episode and potentially help overcome any information asymmetry and uncertainty, helping to sort out ambiguity. Such ambiguity and uncertainty is not helpful in reducing the level of perceived risk to stakeholders after failure events. This form of sensegiving may be relevant to this study as adverse deviations are partial failure events, which bring ambiguity and uncertainty.

Identity. Actors make sense of interrupted events through the influence of the identity that they have developed (Weick, 1995 18-24). Many sensemaking studies to date have concentrated on how identity is constructed through sensemaking, opposed to how identities influence sensemaking.

There are identified influences on sensemaking which are important as they may enhance or distort sensemaking. Brown, Stacey & Nandhakumar (2008) argue that sensemaking should be seen in the context of an individual's efforts at identity construction (refer to Table 2.1). This may produce heterogeneity in sensemaking through the operation of ego defences (e.g. denial, rationalisation and fantasy), meaning people make sense under the influence of their individual specific needs for self-esteem, self-efficacy and self-consistency (Erez & Earley, 1993). Influences of these types may have an impact on how the individual views sensemaking which then feeds into the social interaction to glean sense from each other. This may explain the differences of interpretation in a sensemaking scenario when several people view the same episode and make sense of the outcomes differently and then act differently based on their individual sensemaking. This view contrasts to the earlier held view that organized actions are merely the consensual product among a group (Louis, 1980, 1983; Pfeffer,

1981; Smircich & Morgan, 1982). An alternate position recognises that a minimal shared understanding is sufficient to produce common action (Weick, 1979, 1995; Weick *et al.*, 2005). Sensemaking and action are related in a complex process in which meanings are continually constructed and destroyed as more sensemaking communication occurs and new actions are taken. Although there is literature that suggests sensemaking is linked to identity generation and maintenance, (Brown, 2000; Patriotta, 2003a; Patriotta, 2003b) this may be contradictory to the above views where both consensus and minimal shared understanding produces common action. There may be conflict between personal identity generation and maintenance and obtaining consensus or a minimal shared understanding. Brown, Stacey & Nandhakumar (2008) pursue this line and present potential reasoning why sensemaking can differ from one person to another having experienced the same situation. This may be useful in this research as failure may be interpreted as success and vice versa if sensemaking does not produce consistent results. Impression management and attributional egotism relate to identity in that impression management relates to the way individuals present themselves and attributional egotism relates to a tendency of attributing outcome to self.

Impression management relates to the way individuals present themselves in influencing the perception others have of them (Schlenker, 1980; Tedeschi, 1981). This may influence the connection between sensemaking and the associated future actions. In the context of failure, this may be used as a defensive mechanism in diverting failure away from an individual to other factors, and may lead to denial that either a failure has occurred or that a failure has occurred but is in no way connected to the person in question.

Attributional egotism can be defined as the tendency of individuals to attribute favourable outcomes to self and unfavourable outcomes to external factors (Bradley, 1978; Staw, 1980; Bettman & Weitz, 1983). This is aligned to impression management in that it may

produce denial of failure, or even attempt to substitute failure for a perceived success. Brown *et al.* (2008) argue that the concepts of impression management and attributional egotism need to be more effectively integrated into mainstream theorizing on sensemaking to explain more fully how people understand and read meaning into their work and actions. By observing individual differences in sensemaking, we may ultimately be better placed to explain how order emerges from dissensus, ambiguity and disagreement.

Cognitive frameworks: These frameworks influence the cues that actors notice and extract from the episode. Sometimes such frameworks are specific and sometimes general. Examples of general frameworks include cultural (corporate, regional etc.) and ideological (professional, gender, political etc.) frameworks. Examples of specific frameworks include the National Health Service and Academia where there is history of “how we do it here”.

Emotions: A poorly examined facet of sensemaking is the role of emotion in the process (Gioia & Mehra, 1996; Magala, 1997). Emotion can be defined as “*a transient feeling state with an identified cause or target that can be expressed verbally or not verbally*” (Russell & Barrett, 1999; Grandey, 2008). Emotions may be an important element in sensemaking (Maitlis *et al.*, 2014) through a critical role in detecting and attending to anomalies (Adler & Obstfeld, 2007). Emotion has been shown to direct attention towards certain cues (Ohman, Flykt & Esteves, 2001), and to alert actors to possible unexpected events. Emotion has been acknowledged as to how events are interpreted, including the making of strategic decisions (Forgas, 1995).

Sensemaking traditionally was considered as a natural reaction to interruptions, but more current thinking (Maitlis *et al.*, 2014), reframes sensemaking as an effortful and potentially negative experience that individuals may avoid, and hence the onset requires explanation. Maitlis *et al.* argue that the emotional reaction provides energy to sustain

actors throughout the sensemaking process. Certain emotions are more likely to provide this compared to other emotions and intense negative emotions may prevent sensemaking. The following differing emotions are proposed to impact the sensemaking process differently as follows: Positive emotions are more likely to lead to generative sensemaking; negative emotions are more likely to lead to integrative sensemaking; self-conscious emotions such as pride and guilt lead to social sensemaking and self-conscious emotions such as hubris and shame lead to solitary sensemaking. Maitlis *et al.* (2014) postulate that sensemakers create accounts and accept or reject them based on the degree to which interpretation, action orientation and felt emotion cohere. Emotion has a place in sensemaking and further research is needed to unpack this important multifaceted role in triggering, shaping and concluding sensemaking processes. Until recently, emotion was reduced to the autonomic arousal experienced when an unexpected interruption occurred, and was viewed detrimentally (Weick, 1995). Recently emotions have been given more attention at both the individual level and team level. Maitlis & Christianson (2014) has set forth a model illustrating that differing emotions can be cues to energise the sensemaking process, sometimes in a negative or conversely in a positive way. At the team level, Rafaeli, Ravid & Cheshin (2009) argue that team emotions lead to higher quality team mental models, such a model is supported by Liu & Maitlis' empirical study (2014) where they found that positively valenced emotional dynamics enable discussions in which actors engage in deeper levels of sensemaking. Although there is not a large body of work in this area, emotions are seen to be an integral part of the sensemaking process, influencing the type, depth and accomplishment of the sensemaking process. Emotion is considered as further work (Chapter 7) and outside the scope of this thesis.

Politics and power: Maitlis & Sonenshein (2010 571) point out that “quite overlooked are the social, cultural, economic and political forces that shape what groups notice, how

they can act and with whom they interact" (571). This omission could refer to the individuals that make up the group or at a group or company or industry level. I consider further the use of politics and power both within the context of the sensemaking process (Chapter 4) and as an influence on outcomes (Chapter 6).

The next few sections consider sensemaking and failure, as all sensemaking episodes from my empirical work commence with partial failure with the resultant need for the board to make sense of the new circumstances. I consider failure further in Chapter 6.

2.5 Failure and sensemaking

There is little point in sensemaking from failure, other than maybe making the individual feel better about the failure, if either s/he is unable to make sense or cannot transport that sensemaking to a further venture. Cannon (1999) concludes that individuals reflecting on past failures are primarily motivated by the need to reduce anxiety resulting from review of the painful events, which could be a powerful influence on sensemaking. In contrast to attributional theory which is preoccupied with the causes of failure, Cannon proposes that sensemaking from failure may energise individuals towards future goals. This appears to be a critical step in positioning the entrepreneur to make sense of the failure; along with all the other elements of sensemaking including enactment, capacity and expectation through the setting of earlier goals by the organisational heads or entrepreneurs themselves.

2.5.1 Grief and sensemaking in business failure

Shepherd (2007) uses micro theories of grief to consider the recovery process from business failure and hence the grief process may have a positive influence on the sensemaking process. Shepherd examines family influences on the ability of the failed business person to recover, and concludes that resources available from the family can be drawn on and effectively used for further business ventures, and that family members with greater emotional intelligence are more effective at knowing where to find such

resources. It is possible that business mentors can be a surrogate to a family member as described in Shepherd's research using a combination of grief counselling tools and emotional intelligence. Tools from grief counselling consist of loss orientation (Shepherd, 2003) defined as: *"The process of constructing a series of accounts about the loss gradually provides the loss with the meaning and eventually produces a changed viewpoint of self and the world"*; and restoration orientation (Shepherd, 2003) defined as: *"The suppression of feelings of loss and getting on with one's life may be an alternative approach to loss orientation"*. Shepherd states that oscillation between the loss and restoration dynamics enables a person to obtain the benefits from both techniques and collectively may reduce the time needed before psychologically the entrepreneur is next venture ready. By contrast he notes that the excessive use of a sole technique may inhibit the entrepreneur from returning to a further venture in an expedient manner. An emotional intelligent individual is more likely to be able to make a judgement call when to switch between counselling modes.

Partial failure is triggered by a significant adverse event from the business plan. As this often has potential downside consequences to board directors, such adverse events can often create a crisis environment, hence I consider the literature around sensemaking in crisis conditions

2.5.2 Sensemaking in crisis conditions

Weick (1988) states that sensemaking in crisis conditions is made more difficult because action that is instrumental to understanding the crisis often intensifies the crisis. He proposes the core concepts of enactment (a potentially significant influence on the sensemaking process) may comprise an ideology that reduces the likelihood of crisis. Weick argues that all crises have an enacted quality once a person takes a first action. To become part of the problem means that people enact some of the environment they face. The first action leads to opportunities and constraints, and a different first action

would no doubt lead to different opportunities and constraints. The link with failure is reported by Weick that crisis can have small, volitional beginnings in human action. Small events are carried forward, cumulate with other events, and over time systematically construct an environment that is a rare combination of unexpected simultaneous failures. These factors are important when considering how differing types of entrepreneurs initially react to failure and subsequent actions and reactions after the initial enactment. Weick refers to the work of Perrow (1984), in which enactment themes are considered. A conclusion is drawn that enactment has most effect on those portions of a crisis which are loosely coupled, where procedures are not standardised and supervision may not exist or is patchy. Enactment is thought to affect crisis management by inducing increased stress levels, resulting in speed of interactions and ideology, and a relatively coherent set of beliefs that bind people together and explain their worlds in terms of cause and effect relations.

2.5.3 Communication and meaning construction in failure

A further consequence of failure events (which tend to be disruptive) is the requirement to communicate and to construct meaning. This element of sensemaking will be considered in this study to investigate how communication and meaning construction is characterised in the unfolding of sensemaking episodes and subsequent actions as outputs from the process. Cannon (1999) notes that the human concepts of failure are learned, from the observation that babies experiment and learn through trial and error and integrate into later life the values the social system imparts to the baby (Degeus, 1988), quickly learning to link failure with the negative emotions of being a bad child (Erikson, 1950; Tangney, 1995).

2.6 Time and sensemaking in failure events

Cannon (1999) considers the impact of time on sensemaking. He comments that past research before 1999 has concentrated on responses to failure, compared to reflection

on failure. Research concentrating on the reflection of failure sensemaking is able to address such research questions around the relative importance of response behaviours after a negative outcome over time. There are obvious challenges in attempting to consider time, including the distortion of truth due to memory changes or a more conscious decision to rewrite history. This may have a significant impact on the future decisions of entrepreneurs including both the appetite to commence new ventures and decisions made within the context of a new venture. Shepherd & Cardon (2009) discuss possible reasons why some people are better able to regulate their emotions throughout time during and after a failure event. It is put forward that such negative emotions can lead entrepreneurs to overestimate the likelihood of negative outcomes and to underestimate the likelihood of positive outcomes for subsequent ventures, which may have an impact on lowering or increasing the probability of future failures or successes. Hence there have been research angles on influences on sensemaking, however it is likely that such a search for influences has not been exhausted.

2.7 Sensemaking within entrepreneurial ventures

There has been little scholarly work of note that specifically addresses sensemaking within entrepreneurial ventures where the unit of analysis tends to be an individual himself, opposed to a team. This more individualistic approach to sensemaking is typically grounded in the social cognition literature and uses frameworks such as schemata, mental maps and interpretive schemes on which individuals make sense of situations (Fiss & Zajac, 2006; Kaplan, 2008; Bingham & Kahl, 2013). This approach places an emphasis on how individuals interpret and respond to sensemaking. Table 2.2 summarises key sensemaking studies where the unit of analysis is the individual actor.

Unit of analysis	Link to theory	Literature	Methods/data capture
Individual actor	Attributional sensemaking	Weiner 1974,1985 Wong and Weiner 1981	Conceptual Questionnaire and casual dimension analysis
Individual actor	Self regulating behavior	Bandura 1991	Conceptual
Individual actor	Identity construction	Brown Stacey & Nandhakumar 2008	Conceptual
Individual actor	Impression management	Schlenker 1980 Tedeschi 1981	Conceptual
Individual actor	Attributional egotism	Bettman & Weitz 1983	Review of annual reports narrowed to shareholder letters
Individual actor	Enactment, commitment and capacity	Salancik 1977	Sampling and correlation analysis (Quantitative)
Individual actor	Psychological approaches	Shepherd & Cardon 2009 Shepherd 2007 Mitchell, Mitchell & Smith 2008	Conceptual Conceptual Focused interviews to selected population

Table 2.2: Sensemaking studies from an individual perspective

The contrast to this approach is the social constructionist approach which is involved in discursive analyses of organisations, and is considered above under organisational sensemaking. Cunliffe & Coupland (2012) argue that sensemaking starts with individuals making sense of themselves first through felt bodily experiences and a sensing of their surroundings, emphasizing sense through the totality of experience, on top of the more traditional line that locates sensemaking in the mind or language.

There is room to use both areas when considering entrepreneurial ventures. Sensemaking effectively takes place in a person's head and actors influence each other based on their personal understanding; or conversely there is collective sensemaking which comes to a temporary halt when enough members engage in a discourse that allows them to act together. Both approaches may have relevance within an entrepreneurial context. Board members of entrepreneurial ventures must deal with equivocal, often confusing, information that often has less historical context than in larger corporate environments where boards tend to deal more with corporate governance issues. In an entrepreneurial venture environment, decisions are required to be made from this chaotic environment and order needs to be restored, such as during periods of adverse deviations from the business plan, as acknowledged by at least one investor director. These periods of divergence away from an agreed course of action to a tipping point resulting in convergence towards an agreed course of action, or alternatively failing to reach a consensus, are periods where sensemaking dynamics are likely to be an engaged process and would accord with the description of sensemaking as follows: *"Sensemaking allows people to deal with uncertainty and ambiguity by creating rational accounts of the world that enable action. Sensemaking thus both precedes decision-making and follows it providing the clear questions and clear answer that feed decision-making and decision-making often stimulates the surprises and confusion that create occasions for sensemaking"* (Weick, 1993 636).

In entrepreneurial ventures, there are likely to be many unexpected events although these episodes do not necessarily trigger sensemaking. The key to the trigger is whether the experience is of sufficient magnitude and importance to cause individuals and groups to commence the “search for meaning”. There is often subjectivity in this judgement call and the importance is driven by several factors, namely impact on individual, social and organisational identity (Corley & Gioia, 2004), personal and strategic goals (Balogun & Johnson, 2004) and group norms (Vaughan, 1996; Dunbar & Garud, 2009).

So sensemaking can be triggered at varying points in an unfolding episode in an entrepreneurial venture, and the actors pick up often disparate cues, some of which are discarded and replaced by further cues, often generated through their own actions and inactions, prompting the search for meaning. Ravasi & Turati (2005) have studied a group of entrepreneurs and found that sensemaking directly plays a vital role in the learning process that underpins innovation in technology ventures. If the entrepreneurs had prior knowledge, they were better able to make sense of the problems and challenges, which suggests that sensemaking is critical in entrepreneurial environments where there is high ambiguity.

CHAPTER 3: RESEARCH SETTING, METHOD, CASE SELECTION, DATA SOURCES AND ANALYSIS

3.1 Research setting

In this Chapter, I outline the rationale for choosing the biotechnology industry as the empirical setting for my research. I require a model industry in which I can observe sensemaking in entrepreneurial ventures and as stated in Chapter 1, my research objectives and main motivation lie around how entrepreneurial ventures can effectively respond to partial failure, in the form of adverse deviations from the business plan. The model industry needs to satisfy the requirement of being an entrepreneurial venture; as well as a suitable environment to observe sensemaking from a trigger or cue of partial failure evidenced by an adverse deviation from the business plan. I initially consider whether the biotechnology industry contains entrepreneurial ventures.

3.1.1 Entrepreneurial ventures

Biotechnology products need to be innovative to have the potential to take globally leading positions required by a purchaser of the product – the larger pharmaceutical industry. Risk needs to be taken and this environment inherently attracts entrepreneurs, often frustrated in the larger pharmaceutical industry which is risk averse. The biotechnology industry has gone through much change over the last few decades. Much of this change has been driven by the challenges faced by the larger pharmaceutical companies, which have become hungry for new biotechnology products to boost flagging product pipelines. This can be demonstrated by examining 2004, which was a difficult year for the pharmaceutical industry. There were heavier demands for fuller disclosure of clinical trial data by the FDA, accusations of collusions between regulatory agencies and companies compromising drug safety and recalls for major products, namely Vioxx and Celebrex: *“These challenges are further compounded in large pharmaceutical companies by weakening product pipelines, escalating costs and generic competition*

eating away at price on products that have come off patent” (PricewaterhouseCoopers 2004). Despite these problems, there are huge unmet medical problems, increasing age demographic and emerging geographical markets (particularly China and India) which all lead to an increased and sustainable need for new proprietary product. This is clearly demonstrated by the extent to which US pharmaceuticals come off patent from 2004 – 2011 on the top ten selling drugs in 2004, shown in Figure 3.1.

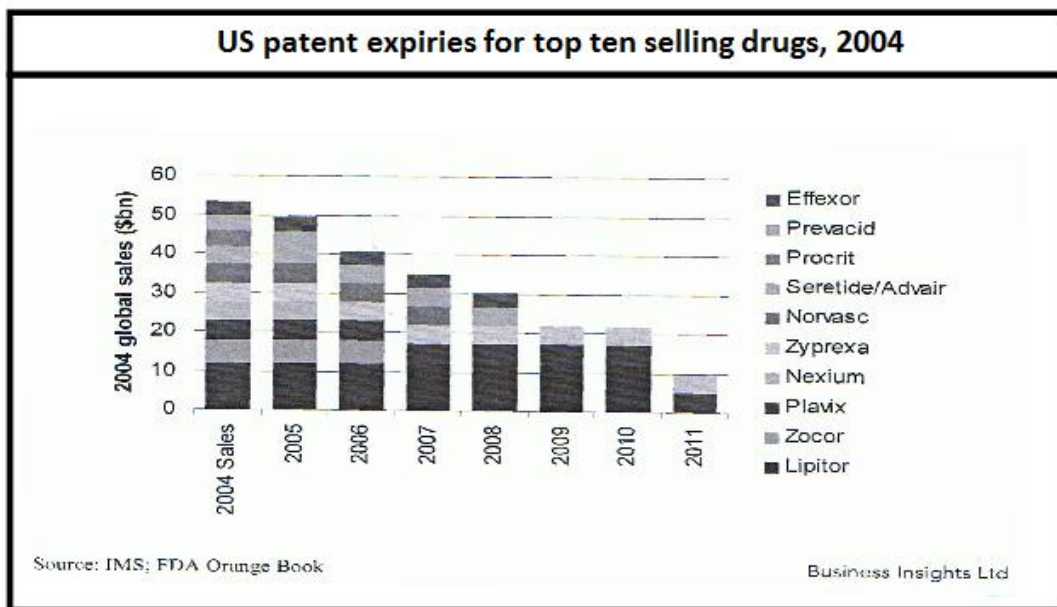


Figure 3.1: The top ten pharmaceuticals (by sales) coming off patent between 2004 and 2011

Gassmann & Reepmeyer (2005) suggest innovation is a key success factor in the pharmaceutical industry (of which the biotechnology industry is a subclass), which aligns with the need for entrepreneurship. They state that: *“Few other industries are as driven by science, research and development as much as the pharmaceutical industry, however we are still a long way from solid guidelines for the manageability of pharmaceutical innovation”* (233). This is evidenced by the fact that in 2003, the major US and European pharmaceutical companies invested more than US\$33 billion in research and

development, at a higher R & D to sales ratio than virtually any other industry including electronics, aerospace and computers (PhRMA 2004). This aligns the key success factor (innovation) to one of the required attributes of an entrepreneur (the ability to identify and exploit opportunities). Hence it is reasonable to conclude entrepreneurial ventures would be commonplace in the biotechnology industry. I next consider whether such a model may be suitable to observe sensemaking episodes.

3.1.2 Biotechnology ventures and sensemaking

Movements in the share price in the biotechnology industry suggest that it is highly volatile and hence a setting where adverse deviations from plans are more likely. Figure 3.2 following shows the volatility of share price from the major European biotechnology companies during 2008. Share price volatility occurs due to the uncertainty of the business plan which often is out of date within weeks of being written. I have invested more than three decades in the biotechnology industry, resulting in the acquisition of in-depth knowledge and access to data, which is beneficial in both planning and interpreting this study; and never been involved in a venture that has held to the business plan for more than three months. As such the business plan represents an idealized journey that can resemble a work of fiction; seldom does a business plan fully hold when put into practice. Deviations from the business plan signal that something has gone wrong, however, such deviations represent equivocal outcomes that are open to multiple interpretations and lend themselves to sensemaking (Maitlis, 2005). Hence it is reasonable to assume this model industry may be a sensible choice to observe sensemaking.

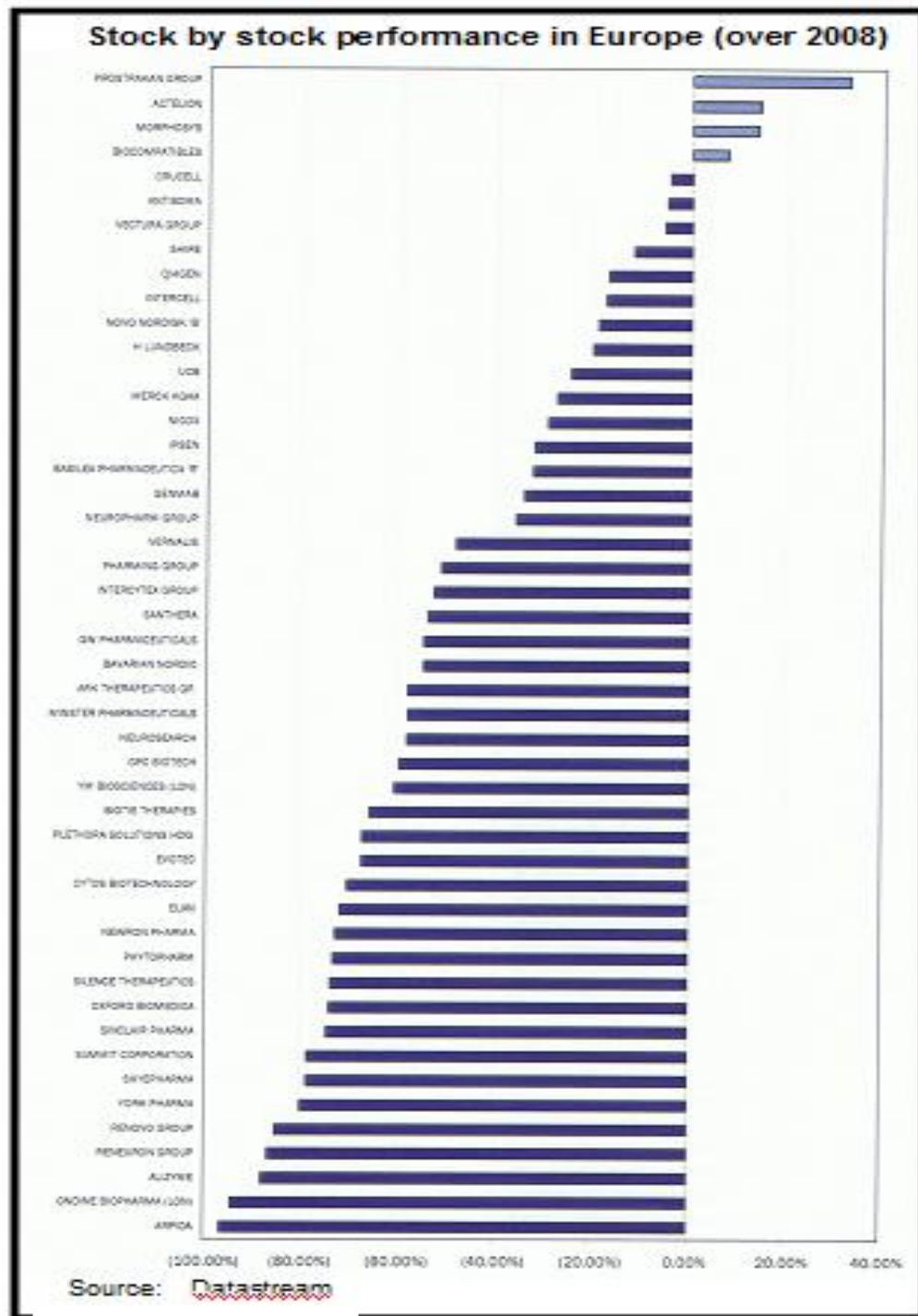


Figure 3.2: Volatility in share price in the biotechnology industry (Europe 2008)

3.1.3 Failure within the biotechnology industry

The extant literature describes the extent of failures in the biotechnology industry. Biotechnology organisations are highly dependent upon the creation of new drugs (Rothaermel & Deeds, 2004), *“while a typical R and D process lasts up to thirteen years, only one out of ten thousand substances become a marketable product”* (Gassmann & Reepmeyer, 2005 233). The percentage of new chemical entities that fail along the drug development pathway are the highest in the preclinical phase (60.2%), and this reduces as the drug candidate moves into the human clinical phase. Once a new drug candidate has been submitted to the appropriate regulatory authority, the attrition rate is noted to decrease to 10% (Buchanan, 2002). Cannon & Edmondson (2005) give examples of failure in the biotechnology industry. They conclude :

90% of newly developed drugs fail in the experimental stage, and thus drug companies have plenty of opportunities to analyze failures. Firms that are creative in analyzing failure benefit in two ways. First analyzing a failed drug sometimes reveals that the drug may have a viable alternate use. For example, Pfizer’s Viagra was originally designed to be a treatment for angina, or Eli Lilly discovering a failed contraceptive drug could treat osteoporosis and a failed antidepressant could be an effective treatment for ADD (attention deficit disorder). Second, probing analysis can sometimes save a failed drug, a good example being Eli Lilly’s Alimta which failed in clinical trials, and after a thorough investigation of the reason for failure by investigating patient notes, it was discovered that the patients who suffered negative effects from Alimta had a deficiency in folic acid. By combining folic acid with Alimta, the treatment worked! (308).

So partial or total failure is commonplace within the biotechnology industry, due to engagement in developing risky products, involving innovation and change. Shepherd

(2003) comments that a vast array of exploratory and inventive organisational activities, which includes drug development, involve high base rates of failure and they call for highly resilient entrepreneurs who must valiantly persevere for eventual success.

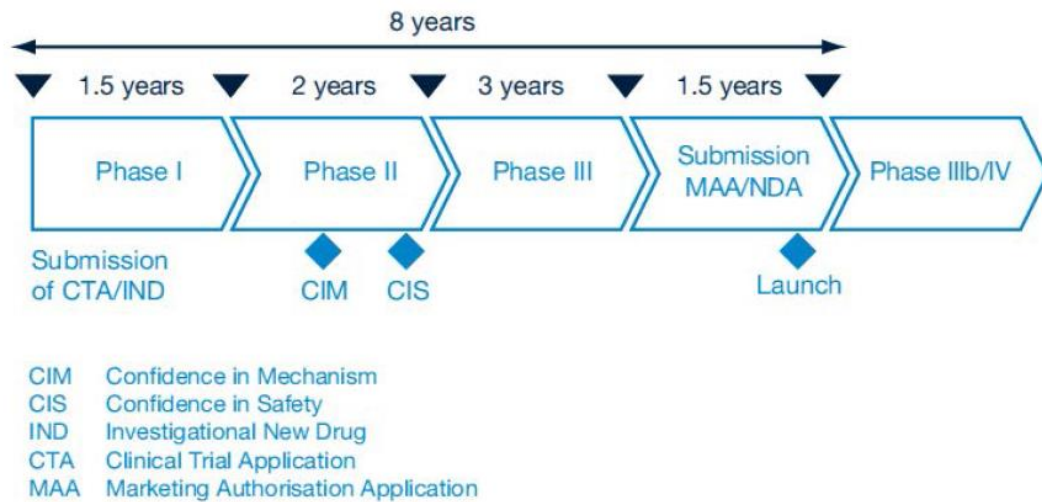
The potential for failure is also heightened in the biotechnology industry because of the risk of being unable to sustain the cash burn requirements; effectively running out of cash and failing to raise the next round of finance. The Ernst & Young survival index (Table 3.1) shows that in both the US and Europe in both 2011 and 2012, around one third of biotechnology companies held less than twelve months of cash reserves, and this was substantially more in Canada.

Years of cash left	US		Europe		Canada	
	2012	2011	2012	2011	2012	2011
	%	%	%	%	%	%
>5 YEARS	22	24	36	27	16	13
3-5 YEARS	8	8	6	10	5	7
2-3 YEARS	15	11	11	10	8	9
1-2 YEARS	21	20	16	20	18	22
<1 YEAR	33	37	31	33	53	48

Source: Ernst & Young beyond borders 2013

Table 3.1: Ernst & Young survival index 2011-2012

The current development process



Source: PricewaterhouseCoopers

Figure 3.3: The biotechnology venture life cycle

The venture life cycle, as depicted by Figure 3.3, shows the diversity and change the venture must progress through as the venture progresses. The entrepreneur builds the business in the earlier days until value reflection points and enterprise value becomes firmly expected. Missing some time points of projected value inflection may be considered as “small failures” whereas missing significant value reflection points may be considered as moving more towards the catastrophic scenario. When significant value reflection points are missed in entrepreneurial ventures, if venture capital backed, often this triggers an adverse deviation which may form a trigger for the commencement of the sensemaking process.

3.1.4 The role of venture capitalists in biotechnology

I place emphasis on funders, notably venture capitalists, as they form a significant element in the financing of biotechnology companies and their founders (entrepreneurial managers). A broader thesis considering further stakeholders would require substantive work and the primary aim of the research is to consider sensemaking within

entrepreneurial ventures, which often take investment in the form of venture capital, hence I now consider the venture capital investment in the biotechnology industry.

Venture capitalists

Because true venture capitalists who invest in early stage risky investments, distinguished from the leveraged buy-out investors who invest in later stage less riskier investments, expect failure as part of their business model, such failure is priced into the cost of the equity at entry and there is acknowledgement that failure is endemic: “*Such a playing field is littered with the remains of failed companies*” (Gorman & Sahlman, 1989: 237). Although there appears to be dispute over the exact failure rate of venture capital funded ventures, several studies have reported that over 40% of venture capital investments either become living dead losers or mega-losers (Ruhnka, Feldman & Dean 1992; Smart, 1999).

Scholars have noted that venture capitalists recognise the valuable learning that may accrue from failure (Cardon & McGarh, 1999). It is recognised that the failure stems from both internal and external factors (Zacharakis, Meyer & Decastro 1999). There are several reasons for such failure (Ruhnka, Feldman & Dean 1992). Such reasons include consequential uncertainties and the limited resources typical in venture capital backed businesses which means unexpected snags can be extremely damaging, along with market problems, and the quality of the management may not be up to the demands of the marketplace (Ruhnka, Feldman & Dean 1992).

3.1.5 Differences in venture capital in the USA and UK

There is an important contrast to the view taken in the USA and the UK. Cope, Cave & Eccles (2004) report the following observations. American venture capitalists are more tolerant and pragmatic about failure and expect entrepreneurs to have two or three failures before they succeed, and they have a better understanding of the entrepreneurial process, making them more supportive and sympathetic of entrepreneurs and

entrepreneurial activity in general. In contrast, British venture capitalists work on the presumption of guilt that the management team are always deficient, and hence they rarely invest in the failed entrepreneur a second or subsequent time, and they tend to adhere to stereotypical cultural differences to failure. This is important as this research will use the European biotechnology sector and its entrepreneurs to gain further insight into sensemaking, and venture capitalists and their representatives on the board of directors (investor directors) are invariably an important influential stakeholder in these ventures. I believe it difficult to research this topic without consideration of the influence of this group of stakeholders on the entrepreneur. US venture capitalists are often interested in entrepreneurs who have a range of experiences, rather than merely investing in people who have a history of success. Venture capitalists may not necessarily fixate on the entrepreneurs' past successes. Zacharakis & Meyer (1998) consider that the US venture capitalists' decision to invest is not negatively affected to any significant degree by a previous experience of failure. Although this may be affected if the entrepreneur has experienced multiple failures with very little success then this seriously brings into question the entrepreneur's ability. The context of the failure is also of importance, e.g. if the entrepreneur had achieved an exit in times of market decline, then although the investors may have recorded a book loss, this may be indeed an achievement of which both the entrepreneur and investor can celebrate.

Cope, Cave & Eccles (2004) reported the views of a small number of venture capitalists towards venture failure. They concluded the following:

There are other factors, other than failure that shape the investment decision and the quality of the concept or opportunity has a strong impact on the decision to impact, along with the ability of the entrepreneur to step out of the CEO position; when the business has reached a certain stage, and maybe step away from management

absolutely. An important aspect of venture capital investment is the previous start-up experience, whether good or bad, and failure combined with success is most favourable, if the entrepreneur has not continually experienced failure. The nature of the failure itself and the perceived level of personal culpability of the entrepreneur affects the investment decision along with a recognition that failure has an element of both luck and timing.

There are opposing views to the conclusions drawn above. Rea (1989) argues that entrepreneurs or management teams perceived as potentially marginal are considered as a recipe for failure even in strong market conditions, and the quality of the entrepreneurial managers is of paramount importance in the venture capitalists' decision to invest (Goslin & Barge, 1986; Roberts, 1991; Sapienza, 1992; Shepherd, Douglas & Shanley 2000). Zecharakis & Meyer (1998) take a middle position and argue that when venture capitalists are uncertain about a certain market, then the entrepreneur becomes a more critical factor in the due diligence.

3.1.6 Overall use of the biotechnology industry model

The debate in this Chapter leads to the conclusion that the use of the biotechnology industry should be a good model to show that adverse deviations from plans are likely and these outcomes are likely to be equivocal leading to the promotion of sensemaking. The presence of investor directors on the board, representing the investor; and the entrepreneurial managers, representing the founders and staff makes this an ideal setting to study the social aspects of sensemaking.

3.2 Research context

Board decisions are critical to the success and failure of a company. A longitudinal study observing the interactions of board members over thirteen years of three venture capital backed biotechnology businesses appeared appropriate for the following purpose of

meeting the specific aims of this research as follows: To understand the individual phases of the sensemaking process; to assess the effect of faultline activation and strength on the promotion of sensemaking and to observe outcomes in the form of decisions made or decisions delayed, through the role of the Chair. I sought to gain a rich understanding of the board directors' strategic decisions, and interactions between board members which affects board decision outcomes and processes as well as the sensemaking process involved in decision-making. To balance the need for depth and some breadth, I chose three cases. The close similarity of the three companies allow for the meaningful comparison of processes; they are all from the same industry, founded during the same year, and all raised multiple rounds of venture capital funding to build their businesses in medical markets. The board members represented several stakeholders, in particular entrepreneurial managers and investor directors, providing the environment to observe responses and interactions of individual board members, and director subgroups when presented with adverse deviations from warranted business plans.

In each case, I identified two episodes of sensemaking following an identified adverse deviation. The episodes start with a business-critical issue which requires a change in strategic direction and a new set of objectives. Such deviations are part of the journey of an entrepreneurial venture and are often in response to downside surprises, such as an unexpected drop in sales, which the investors have the right to investigate with a view to making changes to the company. These deviations are deemed of such severity that they may, if left unchallenged, result in failure. In each such episode, after the cue of the adverse deviation (the sensemaking trigger), I observe sensemaking as a process shaped by context, language and behaviour as well as power and politics. Hence six episodes were selected when the companies deviated substantially from plan, two episodes reaching a consensual board decision, two episodes reaching a forced board

decision in which some board members disagreed or agreed reluctantly to support the board decision, and two episodes where consensus was never attained. Although there were many minor deviations, these periods represent adverse deviations, which if not addressed, had the potential to become catastrophic failures.

Company sensemaking episode number	Episode length	Sensemaking trigger (Adverse deviation)	Sensemaking episode (Description of the journey)	Final board decision
Medco (1)	21 months	Missing a key revenue target which was called for by the warranted business plan	Time between rejected acquisition, through a period of missed sales targets to change of board	Forced decision
Medco (2)	48 months	Missing further key revenue targets called for by the warranted business plan	Lack of sales leading to administration	No decision / Indecision
Pharmadev (1)	9 months	Did not meet its breakeven point at the agreed time	No commercial traction, leading to new team and strategy	Consensual decision
Pharmadev (2)	36 months	Insufficient growth demonstrated by a missed revenue target. The company put up for sale	Scientists excluded from commercial negotiations and eventually possible sale collapsed	No decision / Indecision
Drugtech (1)	2 months	Toxicology result not expected	Change of administration of drug from systemic to a topical route	Consensual decision
Drugtech (2)	36 months	Unexpected board meeting pronouncement by investor directors	Cessation of clinical trial leading to sales process	Forced decision

Table 3.2: A description and duration of the six sensemaking episodes

Several stakeholder groups (entrepreneurial managers, investor directors and investors, and independent director groups) make the environment suitable for sensemaking and sensegiving behaviours, especially where the groups can attempt to gain influence in numbers (Allmendinger & Hackman, 1996). The board members were observed throughout the lives of the companies and interviewed during periods of adverse

deviations agreed by at least one subgroup of directors or one investor director. Subsequently board decisions were made as a unified course of action, a forced course of action, or not made, ending in terminal failure. These periods of divergence away from an agreed course of action to a tipping point resulting in convergence towards an agreed course of action, or alternatively failing to reach a consensus, are periods where sensemaking is likely to be considered as an engaged process. The studies of processes such as sensemaking and sensegiving involve observing and interpreting individuals and groups of actors' constructions and accounts. This calls for a qualitative method (Isabella, 1990; Gioia & Thomas, 1996) with the potential to compare situations across similar case studies of comparable organisations. This study meets these criteria where both retrospective and real time sensemaking dynamics are observed.

3.3 Method

3.3.1 Case study design

I include an outline of each of the case studies later in this Chapter. I take my lead in choosing a multiple case design from the text – Case Study Research Design and Methods (4th edition, Robert K Yin – Sage, 2009). *“The rationale for multi-case designs derives directly from an understanding of literal and theoretical replications. The simplest multi-case design would be the selection of two or more cases that are believed to be literal replications, such as a set of cases with exemplary outcomes in relation to research questions asking how and why. Selecting such cases require prior knowledge of the outcomes, with the multiple case inquiry focussing on how and why the exemplary outcomes might have occurred and hoping for literal replications of these conditions from case to case”* (59). I use inductive analysis because of my aim to *“systematically generate theory grounded in specific instances of empirical observation”* (112). This contrasts to the mainstream methodology stemming from Popper's (1968) critical realism theory where *“inductive verification of theory is disrupted”* (112). I concur with the argument

presented by Johnson & Duberley (2003) to combat Popper's critique in that the deductive testing of theoretical prediction requires that the researcher possesses a priori both the conceptualization and operationalization of the behaviour of actors. To do this, researchers need empirical evidence. I believe after considering other methodologies, that this method is the most useful to answer the research questions posed earlier.

Having spent thirty years in this industry, I had already identified that decision-making takes longer when there is dissention between board subgroups. This may seem obvious, but what is not obvious are whether there are discrete phases that the board progresses through to reach paralysis of decision-making or indecision.

As well as employing a multiple-case design, I seek multiple sources of evidence (see Table 3.3) as this allows for the addressing of a broader range of historical and behavioural issues (115-116). The most important advantage presented by using multiple sources of evidence is the development of *"converging lines of inquiry in a process of triangulation and corroboration"* (116). By seeking multiple sources of evidence from multiple sources, the following applies: *"Any findings or conclusions from case studies are likely to be more convincing and accurate if based on several different sources of information following a corroboratory mode"* (116).

Patton (2002) discusses the benefits of both data and investigator triangulation. Data triangulation encourages the collection of information from multiple sources aimed at corroborating the same fact or phenomenon and overcomes the potential problem of construct validity because the multiple sources of evidence essentially provide multiple measures of the same phenomenon (116-117), which applies in this study. A case study investigator needs to know how to carry out the full variety of data collection techniques (e.g. archival, semi-structured interviews, case study design *etc.*) and in this case as I have been the only investigator, there is no variance in technique. I also take a longitudinal approach to inform how certain conditions change over time.

3.3.2 Reflexive methodology

I am not isolated from the research design and methodology, in that over three decades I have observed and been curious around questions concerning board composition and board dynamics, which has assisted the design of the research study in this thesis. I have made these observations from a privileged position of board membership, sometimes as CFO, CEO, Chair and non-executive director, representing both an industrial expert and the investor. These positions have enabled the observation of both behaviour and language in varying board scenarios, where failure has commenced through the triggering of an adverse deviation from the written and adopted business plan. I would argue that this element of autoethnography is beneficial to conducting this research, through the access to rich data from semi-structured interviews from board directors, which would not be available to the general public through archival material alone. I have understood the culture of the environment in which the research is conducted and bring all of this understanding and experience to bear in designing and conducting this research. I am aware of potential bias, and have ensured that interviews and archival data are taken from differing subgroups of board directors; the entrepreneurial managers, the investor directors, the Chairs and on occasion, the investors themselves. I concur with the view presented by Ellis, Adams & Bocher (2011):

Autoethnographers recognise the innumerable ways personal experience influences the research process. For instance, a researcher decides who, what, when, where and how research decisions necessarily tie to institutional requirements, resources and personal circumstance. A researcher may also change names and places for protection (Fine, 1993), compress years of research into a single text and construct a study in a pre-determined way. Autoethnography is one of the approaches that acknowledges and accommodates subjectivity,

emotionality, and the researcher's influence on research, rather than hiding from these matters or assuming they don't exist

In adopting such a reflexive approach to the methodology in this thesis, I trade access to influential board members and their views with their requirement for confidentiality and anonymity whilst ensuring any patterns and themes are exhibited across all the case studies. I obtain rich data and often inaccessible data to unconnected researchers, with which to draw conclusions that are useful in informing the extant literature and assisting practitioners in managing the board process. These data sources are included in Table 3.3, along with the companies from where the data are extracted from director language and behaviour, during and outside of board meetings.

I add further detail of my methodology by including the adopted semi-structured interview protocol and a sample interview transcript within Appendix 2. The interviewee who gave the sample interview has sanctioned the use of the semi-structured interview for this purpose. The use of semi-structured interviews allows for deviation from the protocol where the interviewee desires to elaborate on issues which they consider worthy of further comment. This enables the capture of rich data, which provides for more informed discussion and conclusions.

3.4 Case selection

I purposefully chose biotechnology case studies in which adverse deviations had been identified, with both entrepreneurial managers and investor directors as board members. I noticed that some of the sensemaking episodes ended more swiftly than others with more consensual decision-making, whilst other sensemaking episodes were more protracted and resulted in indecision or a forced decision (see Glossary for definitions). The following narrative gives a summary of the chosen case studies.

3.4.1 Drugtech

Drugtech was established in 2000 to develop pharmaceutical medicines for the CNS (Central Nervous System) market to meet unmet medical needs. The Company commenced with two founding scientists. The board, which included entrepreneurial managers and investor directors from its first seed capital funding, and management team were assembled as the company matured from a drug discovery company into a development company conducting clinical trials. Drugtech operated through a virtual business model and employed between one to twelve staff depending whether it was conducting human clinical trials. Drugtech had received four rounds of private funding in the form of seed, angel, venture and institutional investment. They conducted six clinical trials in total and eventually sold their patents and clinical data in 2015. The CEO, CSO, non-executive director, business development director and Chair were all interviewed during 2009 and the Chair interviewed again during 2010. All interview transcripts were shown to interviewees to agree the accuracy of the transcriptions and all were interviewed by the author of the thesis. Names of both the individuals and the Company have been changed to maintain anonymity.

3.4.2 Medco

Medco was established by two professors from a leading UK University with the goal of providing cost-effective treatments within their therapeutic areas. Medco raised investment of over £5 million in venture finance, enabling the company to establish operations, to trial and launch their first product in the UK and acquire a pipeline of innovative and high potential products. Evidence supporting its market potential included positive responses from clinicians and patients as well as the supply of the first product to clinicians in multiple therapeutic areas.

Five years after its inception, Medco's management team completed the acquisition of an international biopharmaceutical company. Through the transaction, Medco acquired

the assets of the target company including the rights to commercialise its product and intellectual property portfolio. The integration of these therapies provided Medco with a strengthened capability to take a distinct, multi-stream approach to this therapeutic area. The entrepreneurial managers wanted to pursue further acquisitions, but could not gain board support. To exploit the new and existing IP, Medco was set for an IPO but due to the downturn in the global financial markets was unable to raise further finance and went into administration. The assets have subsequently been taken over and the facility remains intact. The CEO, Chair, two investor directors and the COO were all interviewed during 2013. All interview transcripts were shown to interviewees to agree the accuracy of the transcriptions and all were interviewed by the author of the thesis. Names of both the individual and the Company have been changed to maintain anonymity.

3.4.3 Pharmadev

Pharmadev was formed to commercialise multiple new drug candidates identified in a UK university which had the potential to dramatically impact a specific therapeutic area. Early funding was used to demonstrate the likely efficacy of the technology and a further investment was used to develop the pipeline and to continue to protect the assets.

Pharmadev always intended to raise further monies for the later more expensive clinical trials, their preference being to sell the Company to one buyer, maximising value and dovetailing resource with the acquirer. Pharmadev was eventually put up for sale, however a transaction did not materialise. The University which founded the Company acquired the total shareholding of Pharmadev, to ensure legacy shareholders were fully satisfied. The CEO, ex-Chair and CSO were all interviewed during 2012 and the investor director during 2013. All interview transcripts were shown to interviewees to agree the accuracy of the transcriptions and all were interviewed by the author of the thesis. Names of both the individual and the Company have been changed to maintain anonymity.

3.4.4 Choice of sensemaking episodes

All sensemaking episodes commence with an adverse deviation from plan triggered by a specific event (Table 3.2). All deviations are substantial and have the potential to cause partial or total failure to the Company. At the stage of the trigger, it is not known how the actors will play out the episode and observing the episodes may inform new sensemaking processes or confirm existing processes.

Drugtech

The first sensemaking episode concluded in a change of strategy of drug administration from systemic to topical administration triggered by an unexpected toxicological result suggesting that there was too great a personal risk to the entrepreneurial managers in moving from animal testing to administering the drug candidate via systemic injection into humans for the first time. This led to a swift consensual decision (two months from the sensemaking trigger to the end of the episode). The second sensemaking episode commenced several years later when the board was divided on whether to proceed with further drug development. The sensemaking trigger was an unexpected board meeting pronouncement by investor directors to stop all drug development. This decision eventually led to the suspension of operations and the Company being put up for sale.

Medco

The first sensemaking episode was triggered by the Company missing a revenue target at an appointed time point which was a critical milestone for the investors. Some actors believed that the business should be built through sensible acquisitions which would enhance the revenue and potentially make up the deficit, whilst others wanting to forge an exit. Although this first sensemaking episode was protracted (twenty-one months in duration), it eventually ended with the forced decision that no further acquisitions (after the initial acquisition) were necessary, as growth should be attainable from the existing operational base. The second sensemaking episode was triggered by a further missed

revenue target. This sales decline continued for four years, until the Company eventually went into administration. Multiple enduring interpretations of the reason for the adverse deviation in sales ensued, resulting in a protracted period of indecision.

Pharmadev

The first sensemaking episode was triggered by the Company not meeting its breakeven point at an agreed timepoint in the business plan. From this point the Company was not sustainable with its remaining cash reserves and was forced after a period of nine months to return to shareholders with a request to recapitalise the company. This aim was achieved but not without removing the Chair and the CEO. The second sensemaking episode occurred over thirty-six months of duration where there was a belief that Pharmadev would be acquired but the purchaser pulled out of the sale leaving Pharmadev with legacy creditors that were cleaned up by the original shareholders. The trigger for sensemaking in this episode was the point at which the Company missed a revenue target at an agreed time, and the Company was put up for sale. During these thirty-six months, the scientists were excluded from board discussions and the board was unable to reach a decision on how to proceed following the failure of the sale. Pharmadev was eventually forced into administration.

3.5 Data sources

The research is based on observations over thirteen years of three biotechnology companies in the UK. Names and product have been changed to maintain anonymity. The core data was collected from field work over five years from 2009 – 2013. In this period, I conducted fifty-eight semi-structured interviews, including six focus groups from half an hour to two hours in duration. Around these interviews, I collected documentation for each longitudinal case study comprising day books, where I supplemented the interviews with observational notes, minutes of board meetings, marketing literature, power point documents, clinical trial protocols, emails and meeting minutes. All interviews

were recorded and transcribed, and information from field notes, transcripts, archival material and other supporting documentation was used to construct the episode timeline and in particular, the varying interpretations by the actors of the same episodes. In total, six sensemaking episodes were selected where the companies adversely deviated substantially from the warranted business plan. They were substantial in that if not dealt with, had the potential to cause partial or total failure. The decisions that followed each sensemaking episode were varied; two episodes were followed by consensual board decisions, two episodes were followed by forced board decisions whereby some board members disagreed but agreed reluctantly to support the board decision, and two were followed by protracted indecision, resulting in board paralysis and eventual company failure. These decisions are presented in Table 3.2, presented earlier along with the source of data from all case studies presented in Table 3.3.

Organisation	Chair	Investors	Investor Directors	Entrepreneurial managers	Data sources
Medco Interviews	4	2	2	6	14 semi-structured interviews 4 external marketing documents >15 informal non-transcribed interviews <i>Ad hoc</i> reports Technical product bulletins PowerPoint presentations 3 clinical trial protocols
Pharmadev Interviews	1	1	4	3	9 semi-structured interviews 4 external marketing documents >15 informal non-transcribed interviews <i>Ad hoc</i> reports Technical product bulletins PowerPoint presentations 4 clinical trial protocols
Drugtech Interviews	1	2	2	8	13 semi-structured interviews 2 emails between investors and management team 10 years of management accounts 10 years of daily dairies 10 years of statutory accounts <i>Ad hoc</i> reports >50 informal non-transcribed interviews 10 external marketing documents Technical product bulletins Board meeting minutes 5 clinical trial protocols
Others	16 semi-structured interviews				
Scoping Interviews	6 scoping interviews				

Table 3.3: Data sources

3.6 Analysis

In performing the analysis, I consulted the Sage Dictionary of Qualitative Management Research (Editors: Thorpe & Holt, 2008). After reading the varying analyses, I chose an analysis that fits the purpose of answering my research questions posed earlier and the following extracts serve to support this decision.

I initially considered “*sensitizing concepts which give the user a general sense of reference in which to look*” (112). I carried out six scoping interviews (Table 3.3) to consider whether sensemaking episodes may follow adverse deviations (as defined in the Glossary) which was deducted from the literature:

A process prompted by violated expectations, that involves attending to bracketing cues in the environment, creating intersubjective meaning through cycles of interpretation and action and thereby enacting a more ordered environment from which further cues can be drawn (Maitlis & Christianson, 2014 11).

The violated expectation appears to be the adverse deviation and after adverse deviations, there is a need for the board directors to make sense of the situation. Although the environment may be more ordered, that does not necessarily mean a positive outcome, which I saw in some cases and not in others. These sensitizing concepts gave me the confidence that I may be able to use adverse deviations from business plans to look for sensemaking process patterns after the occurrence. The aim of this is to identify variances in the phenomenon of interest.

In my study, I then identified key actors who around the board table made contributions` and were from the subgroups identified from the faultline literature (introduced in Chapter 5) of entrepreneurial manager, investor director and Chair. I subsequently identified adverse deviations and the following sensemaking episodes after the deviation (see Table 3.2).

I created a provisional list of case features, common to each identified category, whose differences between categories might be used to explain variation. I include the data coding and methods within each of the empirical Chapters as each Chapter is aimed at distinct segments of this research.

The last stage is to go around an inductive-deductive loop between data collection, analysis and the literature to ensure no additional data are being found to amend relationships or temporal differences in process models (Glaser & Strauss 1967). I unwrap each of the case studies as I move through the empirical Chapters, as follows:

Chapter 4 (Process), where I elaborate the process itself, and the temporality of the phases introducing new components, as well as positioning established components mentioned in the extant literature.

Chapter 5 (Antecedents), where I introduce the individual actors, their capital and dispositions and explain how the individuals align into groups to sensemake and how faultline activation and strength promotes types of sensemaking.

Chapter 6 (Outcomes), where I consider the outcomes as the strategic decision-making process of the board, and hence introduce the decisions or indecision, with an evaluation of the impact of sensemaking on such decision-making, with consideration of the role of the mediation skills of the Chair and the ability to control powerful actors.

Chapter 7 (Consolidation of findings), where I pull the findings together, and consider the scholarly and practitioner implications.

CHAPTER 4: THE PROCESS OF SENSEMAKING IN ENTREPRENEURIAL VENTURES

4.1 Introduction

In this Chapter, I examine how the negotiated process of social interaction shapes sensemaking among actors. My interest in investigating phases of sensemaking makes process research appropriate for this study because such an approach incorporates temporal progressions of activities as elements of explanation and understanding (Langley *et al.*, 2013 1). In addition to advancing scholarly knowledge on the nature of sensemaking in entrepreneurial venture boards, a better understanding of board sensemaking processes should be valuable to the practitioner community.

Entrepreneurship is characterized by equivocality (McMullen & Shepherd, 2006). The business plan at the launch of an entrepreneurial venture represents an idealized journey that can be likened to a work of fiction. Seldom is the venture able to implement its original business plan with adverse (or positive) deviations from the business plan being commonplace, leading to this uncertainty. However, such adverse deviations are equivocal outcomes that are open to multiple interpretations and that lend themselves to sensemaking (Maitlis, 2005).

The focus of this Chapter is to understand the phases of the sensemaking process by observing board meetings in entrepreneurial ventures, and the temporal nature of these phases. Because better than expected performance rarely concerns stakeholders, positive deviations are less likely to generate a need for sensemaking. In contrast, board members need to make sense of any negative deviations to re-orientate the business to accepted goals. When the deviations are adverse, the directors comprising the board have a duty to seek out and agree a path to reverse the adversity and guide the company back on track.

Venture capital backed entrepreneurial ventures are often comprised of two subgroups of directors: Investor directors and entrepreneurial managers (Lim *et al.*, 2013). The debates between differing subgroups with differing opinions can result in multiple interpretations of the same event and can subsequently lead to equivocal outcomes. I examine these subgroups in further detail in Chapter 5. As such, venture capital backed entrepreneurial ventures represent an ideal research setting in which to consider how social interaction between actors shapes the sensemaking process in entrepreneurial venture boards. In considering the issue, I explore how different phases emerge throughout the sensemaking process and consider the influence of powerful actors in shaping the views of directors, whilst sensegiving.

I structure the Chapter as follows: Firstly, I consider the theoretical background, along with a critique of sensemaking theory; secondly, I present the methodology and thirdly, I present the findings, by initially presenting new process models of sensemaking prior to presenting illustrative evidence of the components of each phase. Finally, I discuss the findings and connect the findings back to the theory of sensemaking presented below.

4.2 Theoretical background

In Chapter 1, I defined sensemaking as: *“A process prompted by violated expectations, that involves attending to bracketing cues in the environment creating intersubjective meaning through cycles of interpretation and action and thereby enacting a more ordered environment from which further cues can be drawn”* (Maitlis & Christianson, 2014 11). Such a definition can be traced back to the seminal work of Weick (1995), as described in Chapter 2. To date sensemaking studies tend to examine the move from a somewhat chaotic environment towards a more ordered one. However, there may be contexts such as during entrepreneurial venture board meetings when directors may inadvertently make decisions that move the environment towards a less ordered set of activities. This may form an alternate position to the traditional view of sensemaking, and one in which

sensemaking unfolds in a manner which progressively increases the likelihood of venture failure. Further empirical work would assist in enhancing understanding of the process of sensemaking since only a few researchers have critically engaged with the sensemaking process (Gioia & Mehra, 1996; Engwall & Westling, 2004; Costanzo & MacKay, 2009). Sandberg & Tsoukas (2015: 15) explain the sensemaking process as involving the *“creation of the account”*, that is the initial sense of a disrupted activity; *“the interpretation of the account”*, that is a clearer assessment of the initial sense made; and *“acting from the account to attempt to restore order”*, i.e. the action taken on the interpretation made. At the same time, Sandberg & Tsoukas (2015: 20) suggest a number of general critiques of sensemaking, including *“the concept of sense is insufficiently developed, sensemaking overlooks the larger context in which it takes place, sensemaking reduces reality to subjective understanding”* and *“the notion of the sensemaking process remains relatively vague”* as put forward by a number of scholars such as Gioia & Mehra (1996), Magala (1997), Decker (1998), O’Connell (1998), Mills & Weatherbee (2006), and Hong-Sang & Brower (2008), and I hope to offer greater clarity around the sensemaking process by elaborating the individual phases of certain sensemaking processes.

In clarifying the sensemaking process, I also seek to address several issues raised by Sandberg & Tsoukas (2015) in their critique of the sensemaking literature. The widely-held view that sensemaking is social, retrospective, grounded in identity, ongoing and enacted, with the aim of reaching plausible accounts has remained largely unchallenged. Sandberg & Tsoukas (2015) level several criticisms at the extant sensemaking literature due to their treatment of or lack of consideration given to several issues. I concentrate on those issues that are relevant in answering the research questions: How does sensemaking unfold in entrepreneurial ventures? And how do encapsulated and open sensemaking processes differ?, namely context, language, behaviour, politics and power; each of which I will now explain in turn. I include the issues below also within the

literature review, however in the following sections, I relate the relevant issues to the process of sensemaking and the research question considered in this Chapter.

4.2.1 Context

Firstly, the importance of better understanding the role of context in the sensemaking process is evident from Sandberg & Tsoukas' (2015) review of one hundred and forty-seven articles of which only 46% accounted explicitly for context. The authors suggest that very few studies have empirically investigated how the broader institutional contexts (historical, cultural, epistemic, industrial *etc.*) influence sensemaking efforts. Sensemaking never takes place in isolation, so context is important. In my study, the empirical context involves the board of directors of entrepreneurial ventures which include sensemaking episodes where actors may employ one of two types of sensemaking – encapsulated or open sensemaking – each involving differing sensemaking processes. These differing types of sensemaking are explained in Chapter 1 of this thesis. In the context of my study, encapsulation can occur when there is a subgroup of directors (investor directors) who have a primary role of protecting their investment and another subgroup of directors (entrepreneurial managers) who are primarily concerned with growing the enterprise value of the business. In contrast to encapsulated sensemaking, open sensemaking occurs where subgroups of actors interact freely with other subgroups in their search for meaning (i.e. there is little or no evidence of encapsulation). The use of encapsulated or open sensemaking may influence decision-making in entrepreneurial ventures, (the latter is examined in Chapter 6) especially as numerous equivocal outcomes may require consideration by the board of directors of such ventures. Here, however, I seek to understand, examine and contrast these sensemaking processes, by observing them over a period of between two and forty-eight months (Table 3.2).

4.2.2 Language

Secondly, Sandberg & Tsoukas consider the issue of language, including the linguistic features of discourse, narrative, rhetoric, metaphors and storytelling (Morgan, 1980; 1986; 1993; Brown, 2005; Cornelissen, Oswick & Christensen, 2008; Boudes & Laroche, 2009; Abolafia, 2010; Heracleous & Jacobs, 2011; Cornelissen, 2012). Only 25% of the one hundred and forty-seven studies reviewed by Sandberg and Tsoukas considers the role of language in sensemaking. Language, along with behaviour, is important because both can influence actors' attempts at organising confusing cues and to arrange them into more holistic and coherent interpretations of an episode requiring sensemaking. Language is also especially significant where there are subgroups of actors who use differing language (e.g. entrepreneurial managers versus investor directors) and/or actors who change their language due to their prior experience (e.g. investor directors who have prior entrepreneurial experience). The language of seasoned investor directors can be alien to the entrepreneurial managers, with terms such as ratchets, down rounds and preference shares, often used in describing investment structures.

4.2.3 Politics and power

Thirdly, there is the issue of politics and power. Actors at different levels in organisations often view the same episode differently due to varying levels of political knowledge and the level of pressure exerted by top management (Weick, 1995 53); e.g. Balogun & Johnson (2004) show how different departments in an organization attempt to control and direct sensemaking efforts through power. The existing literature on change shows that top managers try to control managers further down the chain of command (Maitlis & Sonenshein, 2010 571). Sandberg & Tsoukas (2015) report that only 4% of sensemaking articles from the major journals consider such political and power issues. Drori & Ellis (2011) depicted how conflict and power relations are ubiquitous to sensemaking and note that *"multiple uses of sensegiving may well serve the interests of a management that*

pursues an inertial strategic path bolstered by internal hegemony and interests, even at the expense of better business practices and strategies” (15). My empirical work examines such positions of inertia and supplements Drori & Ellis’ study, as I provide further context and empirical studies to inform the scenario where conflict and power cause inertia. Drori & Ellis call for further work to examine the power game initiatives used to erode structures of control by bypassing or ignoring managerial decisions. Interestingly, I observe how power game initiatives re-enforce structures of power and control through sensegiving initiatives that can destroy healthy board debate. This behaviour may be damaging, as there may be no turning back to an effective and efficient board structure, due to a permanent loss of trust. I believe that my empirical setting is conducive to studying these power games because, as stated by Drori & Ellis (2011 3 quoting Crozier), power game initiatives are always contextual and contested where actors are faced with uncertainties within the power structure of the entity. These uncertainties differ between subgroups of actors; in that entrepreneurial managers tend to have more detailed knowledge of the business, whereas the investor directors possess more economic power producing more certainty in relation to these aspects of the sensemaking episodes.

4.2.4 Limitations of sensemaking

Finally, Sandberg & Tsoukas (2015) also suggest that a major limitation of extant theorizing of sensemaking is that it does not allow for prospective sensemaking. Sensemaking is deemed to be retrospective (Weick, 1995) whilst sensegiving is deemed to be prospective (Gioia & Chittipeddi, 1991). Sandberg & Tsoukas (2015) point out two main problems: Firstly, *“sensegiving is couched in terms of the conduit metaphor of communication whereby sense is something that is first made and then given to someone else”* (Lakoff, 1995 116) and secondly that *“sense is not an object to be passed on but a skilful activity to be engaged in. A sensemaker and sensegiver are intertwined and a*

change agent who gives sense to employees has made sense out of sense given to him by other actors” (Sandberg & Tsoukas 2015 25). This suggests that maybe sensemaking and sensegiving are so interdependent that one cannot be understood without the other. I hope to shed further light on this important aspect of sensemaking to enable the investigation of more genuine forms of prospective sensemaking, such as strategic discussions about the future (Tsoukas & Shepherd, 2004; Stigliani & Ravasi, 2012) or the various forms of anticipation experienced by actors while carrying out ongoing organisational activities (Bolander & Sandberg, 2013). This view suggests that the retrospective approach to viewing sensemaking processes may be somewhat limiting to further advancing sensemaking theory. I therefore respond to Sandberg & Tsoukas’ (2015) call for exploring prospective sensemaking.

4.2.5 Sensemaking as a socially negotiated process

In my analysis of six sensemaking episodes, I seek to better understand sensemaking as a socially negotiated process and in so doing address the criticisms discussed above. The episodes (Table 3.2) start with a business-critical issue (an adverse deviation as described in Chapter 1) which require a change in strategic direction and a new set of objectives. Such deviations are part of the journey of the entrepreneurial team and are often in response to downside surprises, such as an unexpected drop in sales, which the investors have the right to investigate with a view to making changes to the company. These deviations are deemed of such severity that they may, if left unchallenged, result in venture failure. In each such episode, after the cue of the adverse deviation (termed the sensemaking trigger), I observe sensemaking as a process shaped by context, language as well as behaviours shaped by power.

4.3 Methods

Certain sensemaking components, already defined in the literature, are used in this Chapter. These specific components, such as sensegiving, sensebreaking and

sensehiding were discussed in the Introduction to the thesis and are also defined in the Glossary.

To further investigate the components of sensemaking, my analysis is based on data from three companies, Drugtech, Pharmadev and Medco, each associated with two sensemaking episodes (either encapsulated or open sensemaking episodes). The first sensemaking episode observed in Medco commences with a period of open sensemaking but then moves into encapsulated sensemaking. I am therefore able to analyse four episodes of encapsulated sensemaking and three episodes of open sensemaking in total. The data sources are presented in Table 3.3.

4.3.1 Data collection

Disclosing the identity of both the case and the individuals is desirable to ensure data transparency, however, anonymity is necessary on some occasions, to preserve commercial confidentiality where interviews are only possible if anonymity is offered in exchange for often rich data. In this case, such assurances were given. Interviewees were contacted after the interview to ensure the accuracy of the transcripts of their interviews. I present the backgrounds to the case studies in Chapter 3, to enable the reader to understand the context in reading the later illustrative quotes and narrative of the sensemaking episodes.

4.3.2 Research participants

The views and experiences of the board members of the three case companies were recorded over thirteen years. There were a different stakeholder groups: Entrepreneurial managers, investor directors representing investors, and Chairs which made the environment suitable for sensemaking behaviour, especially given that the subgroups could attempt to gain influence in numbers (Allmendinger & Hackman, 1996). The board members represented stakeholders, providing the environment to observe the responses of and interactions among individual board members and director groups when presented

with adverse deviations from warranted business plans. The board members were interviewed during periods of adverse deviations from a business plan that had been agreed by at least one subgroup. Some board members were also interviewed subsequently, either when regrouping to enable a board decision to be made as a unified course of action or when failing to make a board decision, often ending in terminal failure.

4.3.3 Data analysis

To study people, subject matter and their context in meaningful ways, Collins (2004) argues that researchers need to acquire interactional expertise, which he defines as *“the ability to converse expertly about a practical skill or expertise but without being able to practise it, learned through linguistic socialisation among the practitioner”* (125). I have worked in this field for thirty years prior to commencing this research and I was part of the culture and norms of the industry which provided an in depth understanding of the research. In their review of process models, Langley *et al.* (2013) suggest *“research questions that focus on how processes themselves (citing sensemaking and decision-making) emerge, develop, grow and decline are compatible with a process metaphysics in which the focus is on how processes (rather than things) unfold over time”* (6). I have used both longitudinal interview data and archival data. These sources are deemed “necessary and suitable” respectively by Langley *et al.* (6) in process research:

Longitudinal data (whether obtained with archival, historical or real-time field observations) are necessary to observe how processes unfold over time. Archival data are particularly suitable for tracing event chronologies, meanings and discourses over long or very long periods of time.

The appropriate sample size for a process study is not the number of sensemaking episodes, but the number of temporal observations made within all the sensemaking episodes (Langley 2013 7). I have presented the evidence in the coding Tables 4.1 & 4.2

following, demonstrating that the new phases suggested later in the Chapter are evidenced multiple times.

Researchers rely on more integrative forms of “temporal bracketing” or “decomposition” (Langley 1999) to identify comparative units of analysis with a stream of longitudinal data. These temporal brackets (which generally unfold sequentially over time) are constructed as progressions of events and activities separated by identifiable discontinuities in the temporal flow. This permits the replication of ideas stemming from the empirical data in successive time periods. The sub processes that are elaborated in this Chapter are formed by using such bracketing. The four sequential brackets for both encapsulated and open sensemaking are examined in the sequential order that they were observed from the empirical data.

The data was analysed as outlined below using the methodology described by Strauss & Corbin (1990) and Miles & Huberman (1994). I created a list of first order codes from case history evidence and then employed an inductive-deductive loop process, moving from the concepts and constructs of the literature to assist in seeking an explanation of the observations from the empirical data. As I observed power game initiatives through conflict becoming more prevalent, more commonplace and potentially of greater significance in the empirical data, I introduced literature drawing on power (Drori & Ellis, 2011), and further consider the influence of power in Chapter 6.

The analysis involved three steps, covered below, in which I move from raw data to consolidated empirical themes, and then move from these themes to aggregate theoretical dimensions that explain the processes of encapsulated and open sensemaking (Pratt, Rockmann & Kaufmann, 2006).

The first step involves grouping the empirical data into statements about issues that lead to the second step, the identification of a theoretical category. The theoretical categories then lead to an aggregate theoretical dimension that can be aligned with the literature as

the third step. This process involves moving backwards and forwards through the steps to achieve an appropriate coding structure that allows for interpretation of the empirical data through literature based theory. An example of this process is as follows: Statements around interviews and archival data around discrediting positions, disagreeing, and adding contradictory data as the first step lead to sensebreaking as a theoretical category. Sensebreaking, as the second step, along with other theoretical categories, sensefreezing, senseforcing and sensehiding lead to the third step, the build-up of the phases of sensemaking, which is the aggregate theoretical dimension.

Step one

I built an initial list of themes and codes based on what I observed from the data, which I read multiple times to generate any further coding. As themes became clear, I compared them across the source documents and sought to refine the boundaries between each theme. The views of different stakeholders were integrated by using interviews, public documents, emails and other sources of relevance. The richness of the data allowed for triangulation between these various documents to allow for refinement, critique and further interviewing if it became evident that further clarification and explanation were needed to piece together the chain of events.

Step two

The second round of analysis involved axial coding (Strauss & Corbin, 1990), which is a practice of structuring data into aggregate dimensions (Corley & Gioia, 2004). During this stage of analysis, the emphasis tended more towards the theory, teasing out theoretical contributions contained in the empirical results. Tables 4.1 & 4.2 below detail the data coding and structure employed in moving from the first order codes to the aggregate theoretical dimensions. The sensemaking processes for encapsulated and open sensemaking were clearly distinct and therefore separate coding and analysis were needed for each process.

Evidence				First Order Codes	Theoretical Categories	Aggregate Theoretical Dimensions
Medco (1)	Medco (2)	Pharmadev (2)	Drug tech (2)			
Ab A Ab	A A A	Ab A A	AB AB A	Discrediting positions Disagreeing Adding contradictory data	Sensebreaking	Phases of sensemaking
a	a a	AB AB	A Ab	Withholding information Refusing to debate on certain issues	Sensefreezing	
A	Ab a	AB AB	AB AB	Achieving aims without consensus Using outside parties overtly to gain undue influence	Senseforcing	
Ab Ab	Ab Ab	AB AB		Giving misleading or false messages knowingly Using outside parties covertly to gain undue influence	Sensehiding	
A	Ab	Ab	AB	Looking for options to move away from a more ordered environment and moving away from accepted goals and direction	Losing goal congruence	Board dynamics
A	A	A	Ab	Pulling away from open dialogue in the pursuit of accepted goals	Disengaging	
A	A	A	Ab	Being in a one-sided dialogue with one position dominating at the expense of suppressing of others	Forced to engage	
A	Ab	A	A	No opportunity of presenting a position due to other actors refusing to debate Chair not effective at translating messages Extreme mistrust leading to inability to engage	No choice of engaging	
a	Ab	Ab	Ab	Subgroups attempting to reach a plausible position across the board table	Communication among both subgroups	Flow of information
ab	ab	Ab	AB	Statements leading to the paralysis of decision-making overtly using power with both subgroups involved, but mainly dictatorial from the investor directors	Communication predominantly from the investor director group	
Ab	ab	Ab	AB	Statements entirely from one subgroup (investor directors) demonstrating overtly the use of power Forcing a position through power outside of the board room	Communication totally from the investor director group	
A	ab	AB	AB	Hiding of facts or pertinent data knowingly and with an intent to manipulate	Hidden communication kept apart from subgroups	
a	a	A	A	Behaviour or language that is conflicting and throws into question existing positions	Disbelief Confusion	Language & interpretive tasks
A	A	A	A	Condensing down larger fluxes of information into smaller digestible portions	Bracketing of valued elements	
A	a	A	A	The abandonment of tasks due to one subgroup refusing to partake in or dominating an activity or conversation	Paralysis	
	A	A	A	Comments from outside the board urging the board to look for consensus	Evaluation of trust	

Table 4.1: Encapsulated sensemaking data coding

Evidence					
Medco (1)	Drug tech (1)	Pharmadev (1)	First order data	Theoretical categories	Aggregate theoretical dimensions
A	AB	Ab	Reaching a consensus as to a definition of the problem with other actors and subgroups, enabling common ground to commence the process.	Accommodating	Phases of sensemaking
A	AB	AB	Understanding the component parts of the solution with other actors and subgroups, enabling common ground to commence the process.	Comprehending	
A	AB	AB	Statements that lead to an acceptable version of the solution overall	Positioning	
A	AB	AB	Adopting new objectives or accepting current objectives during a sensemaking episode	Accepting	
A	AB	AB	Communication between all directors to comprehend	Understanding from cues	Flow of information
ab	AB	Ab	Communication with other actors to write an interpretation of a sensemaking episode	Interpretation through communication	
A	AB	AB	Communication between actors informing an interpretation of a sensemaking episode	Erasing anomalies and contradiction	
A	AB	Ab	Arriving at a consensus through communication	Agreeing final narrative	
A	AB	A	Statements indicating pleasant, friendly or supportive behaviour between subgroups	Pleasant / friendly / supportive behaviour	Board dynamics
A	AB	A	Statements expressing the helpful behaviour or language across subgroups	Helpful	
A	AB	A	Statements expressing the mutual respect across subgroups	Mutual respect	
A	AB	A	Statements expressing the non-combative nature of behaviour or language between subgroups	Non-combative	
a	A	a	Questioning of the situation	Disbelief	Language & interpretive tasks
A	A	A	Condensing down larger fluxes of information into smaller digestible portions	Bracketing	
A	A	A	Socially constructing identity labels	Labelling	
	A	A	Statements expressing satisfaction with resultant explanation	Blameless Praise worthiness	

Table 4.2: Open sensemaking data coding

Key to Tables 4.1 & 4.2:

A = Evidence from 4+ interviews, a = Evidence from 2-3 interviews

B = Evidence from 4 + archival sources, b = Evidence from 2-3 archival sources

Step three

I then considered the role the conceptual categories played in the development of encapsulated and open sensemaking. Approaching the data from this perspective, two starting points were observed: The first involved the move away from considering the views of all directors (encapsulated sensemaking) and a second where all views of directors were seen to be considered (open sensemaking) in debating a sensemaking trigger. In the third round of analysis, therefore, I aggregated conceptual categories into a model that represented a new process. Although there can be many interpretations of events (Van Maanan, 1988), the exercise that was followed helped to avoid fitting the data to illustrate a theory (Wodak, 2004: 200), along with constantly interrogating the theory along with the data throughout the process (Locke, 1996). As is often the case in process studies (Van de Ven, 2007) the processes were not always entirely linear in nature; however, the second order codes were depicted in the process model in a temporal sequence that corresponds with the order in which they generally emerge from the empirical data. Since Yin (2003) recommends that the analysis of case studies includes chains of evidence, I have included such evidence in Tables 4.1 & 4.2 where I illustrate that all first order codes were supported by at least two or more interviews and archival sources from each of the cases for both encapsulated and open sensemaking. I then focused on observations of constant elements (i.e. information flow in one direction) which form a more solid basis for a process model within a multi-case sample (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Van de Ven, 2007).

4.4 Findings

I consider the findings in relation to encapsulated and open sensemaking, and then consider a comparison of both processes. I present the respective process models (Figures 4.1 & 4.2) before I elaborate each of the processes to enable the reader to refer

to the models when reading and considering each individual phase. Tables 4.4 - 4.7 provide illustrative quotations for the phases of encapsulated sensemaking and Tables 4.9 - 4.11 provide illustrative quotations for the phases of open sensemaking. The components, illustrative quotations and phases are further elaborated upon in the interpretation and discussion that follows the Tables of illustrative quotations.

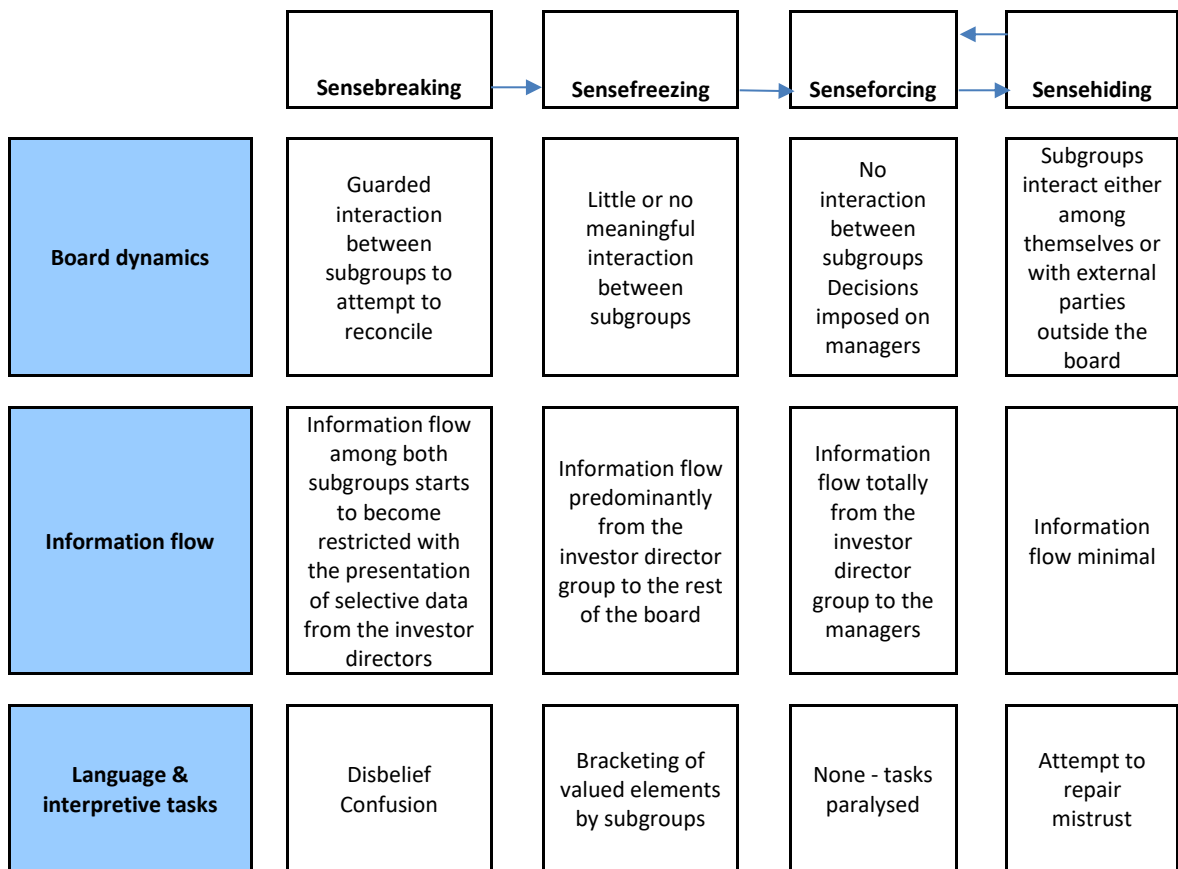


Figure 4.1: A process model of encapsulated sensemaking in entrepreneurial ventures

4.5 Encapsulated sensemaking

The phases of encapsulated sensemaking were observed in all contested episodes (the episodes noted in Table 4.3 below):

	Drugtech Episode 2	Pharmadev Episode 2	Medco Episode 1	Medco Episode 2
Sensebreaking	Boards 1 & 2	Boards 1 & 2	Boards 1 & 2	Boards 1 & 2
Sensefreezing	Boards 3 & 4	Board 3	Boards 3 & 4	Boards 3 & 4
Senseforcing	Boards 5 & 6	Board 4	Board 5	Board 5
Sensehiding	Boards >6	Board 5	Board 6	Board 6

Note: The term “Board” is short for board meeting

Table 4.3: Timing of encapsulated sensemaking phases

I present Tables 4.4 – 4.7 following to provide illustrative quotations around the differing phases of encapsulated sensemaking and provide more context and discussion of these quotations in the narrative after these Tables. The triggers for the encapsulated sensemaking episodes are missing revenue targets at a time point agreed by all directors in the original business plan (Medco, first and second episodes and Pharmadev, second episode) and an unexpected board meeting pronouncement by the investor directors that drug development should cease and the company should be sold (Drugtech, second episode).

Dimension	Illustrative Quotations
Sensebreaking (1st & 2nd boards)	<i>"He {an investor director} was opposed to this course; we must finish what we were doing as quickly as possible" NED (Independent)</i>
Information flow	<i>"The investor directors stemmed the information flow to the entrepreneurial managers" Chair</i>
Language & interpretive tasks	<i>"It caused dysfunction within the board" Chair</i>
Board dynamics	<i>"The board became a less happy place. I think people were more guarded about what they said and what they thought" NED (Independent)</i>
Sensefreezing (3rd & 4th boards)	<i>"The investor directors had become stuck in their own views" NED (Independent)</i>
Information flow	<i>"The flow of dialogue changed because the investor directors imposed the flow" Chair</i>
Language & interpretive tasks	<i>"The investor directors considered elements of value very different to the other board members" CEO</i>
Board dynamics	<i>"I observed a polarisation of positions" Chair</i>
Senseforcing (5th and 6th boards)	<i>"And since he {an investor director} was certainly rhetorically very skilled- it was quite difficult for the rest of the board to stand up to this" NED (Independent)</i>
Information flow	<i>"The investor directors seemed to get new information from the investor that they represented" Chair</i>
Language & interpretive tasks	<i>"Tasks became paralysed" Chair</i>
Board dynamics	<i>"Actions were imposed on the entrepreneurial managers" Chair</i>
Sensehiding (After the 6th board)	<i>"Different activity took place outside the board meetings, including a review of the legal documentation" Chair</i>
Information flow	<i>"Well Mr A used to make suggestions of the kind that the rest of us had been ganging up together to propose this behind his back. The investor directors claimed that they had the backing of the investors" NED (Independent)</i>
Language & interpretive tasks	<i>"Can we ever trust the investor directors?" CEO</i>
Board dynamics	<i>"Our position is to encourage the board to look for a compromise that everyone can get behind" Investor</i>

Table 4.4: Illustrative evidence-Drugtech second sensemaking episode

Dimension	Illustrative Quotations
Sensebreaking (1st & 2nd boards)	<i>"The experiments, after direction from the investor directors, were getting us nowhere" CSO</i>
Information flow	<i>"I did not believe in the sector specialists because their ideas were old ideas and we had to maintain ourselves" CEO</i>
Language & interpretive tasks	<i>"And we had a clear scientific plan which we wanted to execute, but were persuaded to procrastinate" CSO</i>
Board dynamics	<i>"The interference and agenda setting appeared inconducive to building the company we wanted to build" CSO</i>
Sensefreezing (3rd & 4th boards)	<i>"The new Board did not want to hear what was going on in the basic research lab" CSO</i>
Information flow	<i>"The Kingmaker also started to dictate what sort of science the CSO should be doing" Ex Chair</i>
Language & interpretive tasks	<i>"They insisted on the right to appoint a director at this time and this meant important elements of the business were not shared" Ex Chair</i>
Board dynamics	<i>"She'd still come along {a board observer of the investor} and be difficult and obnoxious and paralysing working together" CSO</i>
Senseforcing (5th and 6th boards)	<i>"They could simply do what they always did through force" CSO</i>
Information flow	<i>"You will do it the way I want it done or you won't get the money" Inv Dir</i>
Language & interpretive tasks	<i>"Tasks that had been agreed were abandoned and language became guarded" Ex Chair</i>
Board dynamics	<i>"Actions were imposed and not shared" CSO</i>
Sensehiding (After the 6th board)	<i>"Yes, there were hidden agendas everywhere" CSO</i>
Information flow	<i>"Accept one of our nominees. This produced suspicion and lack of willingness to pass data and information" CSO</i>
Language & interpretive tasks	<i>"All sorts of different people with mysterious agendas were suddenly starting to turn up talking to the company" CSO</i>
Board dynamics	<i>"I had concerns that the investor director, representing the business angel in question, also misrepresented the investor" CFO</i>

Table 4.5: Illustrative evidence-Pharmadev second sensemaking episode

Dimension	Illustrative Quotations
Sensefreezing (3rd & 4th boards)	<p><i>"We actually could have done a deal with a group of investors with a company in a similar space to ours, but could not gain any traction" CEO</i></p>
Information flow	<i>"I just think it was as though we were all a little bit unable to act and reticent to speak" CEO</i>
Language & interpretive tasks	<i>"Conversation became laboured and language became guarded between subgroups" Chair</i>
Board dynamics	<i>"The Investor Directors wanted a swift exit, so the last thing they wanted was a destabilised board" Chair</i>
Senseforcing (5th and 6th boards)	<p><i>"I do remember a board where one individual very eloquently and argued why we shouldn't merge with another company" Inv Dir</i></p>
Information flow	<i>"Dictates were one way from the investor directors to the entrepreneurial managers" CEO</i>
Language & interpretive tasks	<i>"Conversation became forced and superficial with little real activity" CEO</i>
Board dynamics	<i>"The entrepreneurial investors became very subdued and passive" Chair</i>
Sensehiding (After the 6th board)	<p><i>"It got worse over time as information became power" CEO</i></p>
Information flow	<i>"Certain directors were influencing other directors" Inv Dir (referring to within subgroups)</i>
Language & interpretive tasks	<i>"The management team became somewhat disappointed and lost trust, that was going to be difficult to ever trust again" CEO</i>
Board dynamics	<i>"It all became a little suspicious outside of the board room with little activity in the board room "(during board meetings) CEO</i>

Table 4.6: Illustrative evidence-Medco first sensemaking episode

Dimension	Illustrative Quotations
Sensebreaking (1st & 2nd boards)	<i>"I think the institutional board members tended to follow each other" COO</i>
Information flow	<i>"The investor directors used data in a restricted manner" CSO</i>
Language & interpretive tasks	<i>"Directors were confused and this led to confusion of tasks" CSO</i>
Board dynamics	<i>"The CEO had less time to be concerned about board issues, as she was diverted to the needs of the shareholders" CSO</i>
Sensefreezing (3rd & 4th boards)	<i>"None could follow their money, which meant we needed to sell the company" Inv Dir</i>
Information flow	<i>"That gave a little bit of paralysis" Inv Dir</i>
Language & interpretive tasks	<i>"We sort of went through the motions of trying to make things better by assessing certain items of value" CEO</i>
Board dynamics	<i>"Let's make X and Y redundant and the board just procrastinated" CEO</i>
Senseforcing (5th and 6th boards)	<i>"Once the largest two investors decided they wanted to exit, they convinced the other investors" CEO</i>
Information flow	<i>"Once the investors had come to a settled opinion that they wanted an exit, they forced their position on the entrepreneurial managers" CEO</i>
Language & interpretive tasks	<i>"No communal consensual tasks took place" CEO</i>
Board dynamics	<i>"Any conversations were led by the investor directors and ultimately finished with the message, we need to exit" CEO</i>
Sensehiding (After the 6th board)	<i>"Do we need to change the board? This conversation obviously excludes the other directors". Inv Dir</i>
Information flow	<i>"Certain directors were influencing in an underhand manner" COO</i>
Language & interpretive tasks	<i>"Can we ever trust any of the investor directors again" CEO</i>
Board dynamics	<i>"Strategic conversations were held outside of the board room" CEO</i>

Table 4.7: Illustrative evidence-Medco second sensemaking episode

4.5.1 Sensebreaking

Sensebreaking has been defined as *“the destruction or breaking down of meaning”* (Pratt, 2000: 464) (see thesis Introduction and Glossary). Sensebreaking commences whilst there is still frank and open debate across the board table, albeit with disagreement and posturing for position. This is effectively observed within the accommodating phase of open sensemaking, explained later in this Chapter. However sensebreaking moves from accommodating to one subgroup (in my study, the investor directors) attempting to influence the other subgroup (the entrepreneurial managers) through undermining trust. Sensebreaking differs from accommodation through moving from a open, free critical assessment of the problem to an assessment of the problem only through the lens of often the more powerful subgroup. It involves challenging both the positions of others and external information through the suggestion that these positions are nonsensical or do not inform the overall meaning of the discussion (creating mistrust), so are therefore irrelevant or detrimental to the argument.

Sensebreaking is the first sensegiving initiatives observed in all encapsulated episodes during the first and second board meetings (see Table 4.3 above). In all encapsulated cases, the sensebreaking is driven by the investor director group on each board. The status quo is the current defined strategic direction as proffered by the business plan or prior board direction. I initially consider the encapsulated episodes within Drugtech, followed by Pharmadev and Medco.

Within the second sensemaking episode at Drugtech, whilst the current course is to continue with the development of the drug, the investor directors unexpectedly announced that they wish to terminate any drug development. The announcement, made by an investor director during the first and re-iterated in the second board meeting of the episode, is that the company should abandon such a course and immediately move towards selling the assets. This investor director is opposed to the original course: “We

must find a buyer" (NED, Drugtech, second episode 2009, referring to a statement made by an investor director). This creates a situation where each subgroup looks to their own subgroup for sense, those subgroups being the investor directors and the entrepreneurial managers, even though there is still interaction between the subgroups at board level. Sensebreaking, once past the accommodating phase, initiates the move away from shared interpretive tasks around the board table to sharing the tasks intra-subgroup. During this early part of the encapsulated process, the use of power game initiatives is observed with the overt use of power across the board table, observed through language, still with the intention of trying to create the dominant frame (defined in the Glossary). In this instance, the stronger economic power possessed by the investor directors, (because they act as a proxy for the economically powerful investors), is used over the economically weaker entrepreneurial managers (further discussed in Chapter 5). The Chair succinctly states: *"The investor directors then added to the complexity of the debate by aligning their position with the investor"* (Chair, Drugtech, second episode 2010). This is a power game initiative, and at that time, as the investor was not contactable, the investor director effectively stood in the shoes of the investor, affording him the power of the investor himself. Through the destroying of existing meaning, which is the originally agreed course of action (Pratt 2000 464), interpretive tasks become less ordered and more problematic: *"It caused confusion within the board"* (Chair, Drugtech second episode 2010). The environment subsequently changes from a harmonious board to subgroups protecting their retrospective positions, the investor directors wanting to sell the assets, whilst the entrepreneurial managers wanting to continue to grow the business through the continuation of drug development.

In comparing the second sensemaking episode of both Pharmadev and Medco, the same components are observed. In the case of the second sensemaking episode at Pharmadev, a new board is constituted and the new directors, parachuted in by the

investors as managers of change, already have their own sense of what change is required without feeling the need or desire to consult with the old guard. The CSO sums up this position referring to the scientists as follows: *“For three months, they {the scientists} were doing repetitive meaningless experiments”* (CSO, Pharmadev second episode 2012). The use of power is overt at this stage, with the parachuted directors possessing the proxy power of the investors and using that power to influence the entrepreneurial managers, however information flow is still strong between investor directors and entrepreneurial managers in both directions. The CSO outlined this position as follows: *“So the change in direction was indeed driven by the VC funder and the idea behind this was to bring in sector specialists”* (CSO, Pharmadev, second episode 2012). Interpretive tasks move from the execution of a clearly defined strategy to a period of uncertain direction: *“So the change in direction was difficult to believe and caused confusion”* (CSO, Pharmadev, second episode 2012). Board actions move to a suspension of pursuing the original scientific plan, with a direct impact on the business building capability of the entrepreneurial managers. The CSO concluded: *“The interference prohibited us from business building”* (CSO, Pharmadev, second episode 2012).

Within the second sensemaking episode at Medco, there is a clear split in the espoused direction for the business. The investor directors are on a different path to the entrepreneurial managers: *“I think the institutional board members ignored the feelings of the management team”* (COO, Medco, second episode 2013). The use of economic power again is evident as decisions are made by the investor directors that are aligned first and foremost to the fund objectives. These are closed-end funds, which mean that the requirement to generate an exit takes precedent to business building as summarised by the CEO: *“There were quite a few people that were looking after the fund that they were involved with and used that to influence”* (CEO, Medco, second episode 2013).

Information flow at this stage remains strong between both subgroups of investor directors and entrepreneurial managers. As in all other encapsulated episodes, tasks are interrupted as not all understood what the plan is, as summarised by the COO: *“Because I had full awareness of what was going on, I was able to plan for that and prepare for it. But others were confused”* (COO, Medco, second episode 2013). And such actions move away from business building to managing the investors and their push for an exit. In this case as the entrepreneurial managers are not experienced, they tend to spend more time in attempting to keep the peace, albeit not accepting the position. The CEO becomes diverted from running the business: *“The CEO devoted 70-80% of her time to managing the shareholders”* (COO, Medco, second episode 2013).

Across all encapsulated sensemaking episodes, within the phase of sensebreaking (see Figure 4.1), I observe the same pattern as follows:

Board dynamics

I observe the subgroups of actors moving from the exchange of pleasant and open interactions (agreement, reinforcing positions and validating positions) to disagreement, attempting to dismantle the views of other subgroups, and seeking to discredit the opposing subgroup by attempting to undermine their proffered account. There are strong and engaged interactions between subgroups, as they attempt to tease out their respective positions. However, although they are doing similar things, these actions are not for the collective good. This results in a tense and combative environment around the board table. As already stated, the first stage of encapsulated sensemaking (sensebreaking) also commences with the same activity as observed in accommodating, the accommodation of multiple views to diagnose a problem. As soon as trust is lost and the presentation of material from one subgroup cannot be reconciled to the view of the world by another subgroup, then sensebreaking moves from accommodating to an

attempt to create a void of meaning through no longer considering sense other from their own subgroup. (refer to section 4.6.1).

Information flow

Information flow continues to be between all board members, irrespective of subgroup, albeit the information passed from the investor directors to the entrepreneurial managers tends to be more selective as the phase progresses, while interpretive tasks move from a collective approach involving all directors to tasks within either the investor director subgroup or the entrepreneurial manager subgroup. All sensebreaking appears to take place early in the encapsulated episodes, being observable during the first and/or second board meetings in the encapsulated sensemaking episode. In all the encapsulated episodes, I observe the emergence of multiple accounts of the sensemaking trigger. Due to varying interpretation of the reason why the sensemaking trigger occurred, encapsulated sensemaking is unlikely to occur when there is a unitary account of the sensemaking trigger because there is no need to compete and all actors are more likely to accept the same view of the world.

Language and interpretive tasks

Language becomes more guarded and there are similar interpretive tasks as those seen in open sensemaking (elaborated later in the Chapter), including working through disbelief, in response to the sensemaking trigger. However, unlike the process of open sensemaking, where clarity and meaning is sought by all actors which is attempted at the start of the sensebreaking phase, in this encapsulated process there is the progressive destroying of each subgroup's sense (i.e. their offered views) and a working through of confusing scenarios, which becomes a more difficult, and sometimes impossible, interpretive task.

Whilst in sensebreaking, meaning is broken down: *"The investor directors started to communicate more with the investors"* (Chair, Drugtech, second episode 2010); there is

no active prevention of sensemaking between all actors. Strong positions are taken, but during the sensebreaking phase, there is still active debate between subgroups in the hope of reaching a consensual decision, although sense accepting by one subgroup becomes more limited as the phase progresses. Once the next phase of sensefreezing is reached, considered next, I observed efforts that prevent sensemaking.

4.5.2 Sensefreezing

The notion of sensefreezing emerges inductively from my data. As a variant of sensegiving I define sensefreezing as: *Sensegiving efforts which knowingly or unknowingly prevent sensemaking and/or search for meaning and associated action.* This component emerges after observing initial attempts by both subgroups of actors to discredit alternative positions (sensebreaking), and then paralyse the ability of a subgroup (sensefreezing) to present their case by attempting to render the opponent's case the only plausible alternative.

In the second sensemaking episode at Drugtech, the investor directors take such a polarised position that they refuse to accept explanations from the entrepreneurial managers: *"The investor directors refused to move their position"* (NED, Drugtech, second episode 2009). There is a continual use of power from the earlier sensebreaking phase, which results in the information flow moving predominantly from investor director to entrepreneurial manager. Due to the imposing of differing objectives, such viewpoints become subgroup specific with little interaction between subgroups: *"The investor directors considered very different routes compared to the other board members"* (CEO, Drugtech, second episode 2009). Such viewpoints have the potential to lead to paralysis between subgroups: *"I struggled to align opposing views"* (Chair, Drugtech, second episode 2010).

Whereas in sensebreaking, there is an attempt to combat the power play by both subgroups through further debate. Once sensefreezing is reached the power play

becomes almost entirely one-sided in the domain of the investor directors, as viewed by the ex-Chair, when describing a new investor director that had been forced onto the board by the investor, who he calls “The Kingmaker”: *“The Kingmaker also started to dictate to the CSO which led to a combative environment”* (Ex-Chair, Pharmadev, second episode 2012). The ex-Chair also observes that such tasks became more subgroup-centric with fewer or no interpretive tasks undertaken by the entrepreneurial managers, as the investor insisted on the right to appoint a director at the time. This is an attempt to dominate the board even more so by the investor directors: *“She’s {an observer to the board at the request of an investor} not even on the board but she attempted to paralyse the debate”* (CSO, Pharmadev, second episode 2012).

In the case of Medco, in the first sensemaking episode where the sensemaking trigger involves missing a key revenue target which was called for by the warranted business plan, while sensemaking starts as open sensemaking (covered later), it swiftly moves to encapsulated sensemaking by the third board meeting where there appears to be sufficient apathy around the board table to reject further mergers. This apathy is a form of sensefreezing generated by the lack of desire of one subgroup, the investor directors, to engage in meaningful board discussion around the subject matter: *“Nobody else on the board seemed interested in doing that [referring to a further acquisition] and as a result, it was a no go”* (CEO, Medco, first episode 2013). Tasks are becoming paralysed at this time, although there is still activity that keeps things looking like they were in motion: *“I just think it was as though we were a little bit unable to act, a type of paralysis”* (CEO, Medco, first episode 2013). This is still maintained as the investor directors are keen for the outside world to see a functional board: *“The investor directors decided that they did not want to rock the boat, so they entertained other ideas and activities but did not really go along with them”* (Chair, Medco, first episode 2013). Information flow is

clearly seen from the above as predominantly from the investor director, who is proposing the merger to the entrepreneurial manager.

During the second encapsulated sensemaking episode at Medco, again sensefreezing is observed through one subgroup, the investor directors, refusing to discuss business building as they need to exit their investment as viewed by one of the investor directors: *"All had reached their maximum investment levels, which meant we needed to stop growing the business"* (Inv Dir, Medco, second episode 2013). There is an acknowledgement at this stage that power game initiatives could have been employed by the investor directors, but they decide not to rock the boat, as a destabilised board and company would not be healthy during the sale of the company. This view is echoed by one of the investor directors themselves: *"Because it's quite hard to say everybody is made redundant, even though we could enforce that"* (Inv Dir, Medco, second episode 2013). Interpretive tasks are still ongoing but with little intent of following through or action: *"We sort of went through the motions of trying to make things better by assessing certain items of value"* (CEO, Medco, second episode 2013). Any substantive decisions are delayed to frustrate any actions as stated by the CEO: *"I was saying: Let's make X and Y redundant and one of the investors said: Just wait"* (CEO, Medco, second episode 2013).

Across all encapsulated sensemaking episodes, within the phase of sensefreezing, I observe the same pattern as illustrated in Figure 4.1 as follows:

Board dynamics

In the sensefreezing phase, I observe the use of power by actors with the greatest economic currency, namely the investor directors' subgroup. These actors have greater voting power as a proxy for the investor, and can use this either as a threat or by tabling a resolution for a board vote. The investor directors (the stronger subgroup economically) are observed as the only users of power game initiatives.

Information flow

Information flow is predominantly from the investor director group towards the entrepreneurial managers, as more information is added to the narrative purportedly from the investor via the investor directors as a proxy for the investors. The exception being where the investor directors hear the pleas of the entrepreneurial managers to not rock the boat but effectively have no interest in implementing the strategy of the entrepreneurial managers.

Language and interpretive tasks

The interpretive tasks among subgroups falls away towards little or no meaningful interaction, and this is replaced with the search for meaning from within the individual subgroups. Therefore, shared action abates and intragroup interaction increases/dominates. Bracketing occurs in isolation within each of the subgroups rather than between the groups. This is a way of condensing down larger fluxes of information into smaller more digestible portions, or “*carving out of the undifferentiated flux of raw experience...so that they can become the common currency for communicational exchanges*” (Chia, 2000 517; Weick *et al.*, 2005). In this context, the assessment of valued items is different within each subgroup. The investor directors are looking at varying agendas of change and condensing down to preferred options while the entrepreneurial managers are refining their thoughts on whether it may be possible to resist such change; for example, in the case of Drugtech, the entrepreneurial managers value the extension of further drug development to obtain more data (the original plan), whereas the investor directors value using the data currently available to sell the company (a change to the original plan). The economically powerful seek to dominate the interpretation of the sensemaking trigger and drive the agenda for the corrective actions needed in response. This comes to a head in senseforcing, discussed next.

4.5.3 Senseforcing

Senseforcing is seen to follow sensefreezing in all encapsulated sensemaking episodes. I define senseforcing as: *Sensegiving efforts involving the use of pressure to influence the sensemaking of others*. Whereas sensebreaking revolves around the destruction and breaking down of meaning by debate between subgroups, and sensefreezing prevents sensemaking through paralysis, senseforcing involves the use of pressure to influence the sensemaking of others by a dictatorial (and not through debate) edict. I demonstrate this pressure in the following narrative extracts.

In the second sensemaking episode at Drugtech; one subgroup, the entrepreneurial managers, struggle to take a position when the investor directors make out that they were representing directly the views of the investors, as suggested by the independent non-executive director: *“There was also an increasing belief that he and the other director were speaking directly on behalf of the investor”* (NED, Drugtech, second episode 2009). This forcing of sense is backed up with the use of power, the investor directors using their proxy power but extending it to directly representing the views of the investor: *“The investor directors used the fact that they have been appointed by the investor in a way I think to propagate their views”* (Chair, Drugtech, second episode 2010). This results in the information flow totally moving from the investor directors to the entrepreneurial managers. Any attempt to debate the position taken by the investor directors is quenched, with an entrenched position taken by the investor directors: *“One director in particular was very difficult to persuade after he had taken a point of view and refused to debate any other point”* (NED, Drugtech, second episode 2009). Such actions move very swiftly to one of the investor directors attempting to rule the board meetings, with no actions being agreed other than those proposed and imposed by the investor directors. The Chair begins to question his role: *“What is the point of being Chair if one of the non-*

executive directors increasingly tried to take over the meeting?” (Chair, Drugtech, second episode 2010).

Senseforcing is also observed after sensefreezing during the second sensemaking episode at Pharmadev. Consistent with other encapsulated sensemaking episodes, the senseforcing comes from the subgroup with the stronger economic power, namely, the investor directors: *“They {the investor directors} forced an agenda on the rest of us”* (CSO, Pharmadev, second episode 2012). Power at this stage is displayed as an absolute imposition of specific actions by the investor directors. The CSO expresses this situation as follows: *“So, it was a kind of bullet to the head, almost a gun to the head”* (CSO, Pharmadev, second episode 2012). Any interpretive tasks between subgroups are becoming more difficult to execute, as it becomes evident that the agenda is totally one-sided as described by the CSO: *“The founder scientist sort of distanced himself from it all”* (CSO, Pharmadev, second episode 2012). Board director communication is fragmented between the entrepreneurial managers and the members who have been parachuted in by the investors. The CSO observes such a division as follows: *“Older and newer members of the management team refused to debate”* (CSO, Pharmadev, second episode 2012).

In the first episode at Medco, one of the investor directors aggressively achieves his aim by forcing his agenda to stop the drug development: *“He was very forceful and eloquent and he won the day”* (Inv Dir, Medco, first episode 2013). The investor directors use their influence with the underlying investors to take over the agenda, as viewed by the CEO: *“A particular stakeholder group started to forge its own agenda and the fact that they were backed by the investors gave this agenda premier position”* (CEO, Medco, first episode 2013). In the second sensemaking episode at Medco, the investor directors supporting the funds with the largest voting power convince the rest of the investor directors that an exit is needed as quickly as possible: *“Once the largest two investors*

decided they wanted to exit, they convinced the other investors” (CEO, Medco, second episode 2013). The investor directors then use their collective economic power to engage the sales process in an attempt to realise their shareholdings: *“They forced their position on the entrepreneurial managers”* (CEO, Medco, second episode 2013). This action leads to a loss of appetite to work through issues as viewed by the COO: *“Nobody else on the board seemed interested, so lots of abandonment”* (COO, Medco, second episode 2013).

In summary, senseforcing often closely follows sensefreezing, and occurs within weeks (refer to Table 4.3). Once the opposing subgroup’s (the entrepreneurial managers who are economically less powerful) interpretation of the sensemaking trigger has lost plausibility and credibility with the other subgroup, there is a void that senseforcing attempts to fill.

Board dynamics

Powerful actors, who can pursue their goals without the consent of other venture shareholders are more likely to impose their sense on less powerful subgroups. Actions are mandated but not agreed: *“Relations were quite fractious and tasks were imposed”* (COO, Medco, second episode 2013).

Information flow

Rather these powerful actors attempting to force their own sense (i.e. their account of the sensemaking trigger and its implications) on others, once sensebreaking and sensefreezing have failed to achieve their aim, the information flow is totally one way from the investor directors to the entrepreneurial managers to force/impose sense.

Language and interpretive tasks

The language is dictatorial from the investor directors to the entrepreneurial managers, using their power as proxy to the investor. There is no shared action or interpretive tasks

between groups as the group with the greater economic capital seeks to exert influence by forcing their position on the group with weaker economic capital.

4.5.4 Sensehiding

This component has been defined as: *“Promoting a specific kind of thinking and action or manipulation in terms of hiding particular ideas”* (Vaara & Monin, 2010 6). I observe examples of sensehiding in the form of meetings of subgroups of actors (the entrepreneurial managers and investor directors) being held, not in the boardroom, but covertly in a different location. This covert activity, if discovered, creates mistrust and further encapsulation, as well as making it potentially very difficult to reverse the mistrust from this point onwards.

In the second episode at Drugtech, the subgroups of entrepreneurial managers and investor directors stop using the board meetings to debate any issues of strategic importance and effectively meet separately outside of the board meeting: *“Conversation really ceased unless it was within the investor director group or the managers”* (Chair, Drugtech, second episode 2009). This has the effect of keeping any meaningful information flow between the two subgroups.

In the second sensemaking episode at Pharmadev, there appears to be a total breakdown of order and no semblance of sensible board activity: *“There was connivance in abundance behind the scenes”* (CSO, Pharmadev, second episode 2012). There is dictatorial management with little or no scope for consensual decision-making or the ability to negotiate positions. Tasks become random and consistently subject to change: *“Many tasks were abandoned”* (CSO, Pharmadev, second episode 2012). There are no shared actions or interpretive tasks.

In the first sensemaking episode at Medco, information is withheld from the entrepreneurial managers and activity moves away from the boardroom: *“Information was hidden from other directors”* (CEO, Medco, first episode 2013). Shareholders

communicate directly with representative directors. All such dialogue is between the investor directors and the investors, as in this case the investor directors represent all external shareholders (all shareholders other than the entrepreneurial managers). This is often the case in venture capital backed entrepreneurial ventures where a lead investor, through the appointment of their investor directors will represent other external shareholders and provide critical company information, e.g. management accounts and company updates: *“Shareholders who were not represented on the board were unduly influenced”* (Inv Dir, Medco, first episode 2013); and *“hidden conversations were held outside of the board room”* (CEO, Medco, first episode 2013); which leads to a loss of trust and the suspension of all interpretive tasks.

During the second sensemaking episode at Medco, these patterns are repeated. The severe lack of trust leads to the board becoming so ineffectual that it needs to be disbanded: *“Do we need to appoint fresh directors?”* (Inv Dir, Medco, Second episode 2013). The use of power is manipulative and involves coercion as observed by the COO: *“Certain shareholders were being influenced in a hidden way”* (COO, Medco, second episode 2013). All tasks and actions are paralysed, with the continual input of external bodies as observed by the investor directors: *“Two outside bodies attempting to impose ideas on a non-consensual board”* (Inv Dir, Medco, second episode 2013).

In summary, during encapsulated sensemaking episodes, if sensebreaking, sensefreezing or senseforcing are ineffective in producing a narrative that is accepted (whilst others are rejected), sensehiding may be employed. Sensehiding refers to the process of consciously avoiding certain discourses while managing change (Mahapatra & Pattnaik, 2013). In the context of the entrepreneurial ventures I studied, sensehiding manifests itself in predestined actions of orchestrating meetings among subgroups of actors outside of the boardroom to formulate plans and agendas to meet the purpose of that subgroup. Although I present senseforcing and sensehiding as discrete phases in

that order which is predominantly shown in the data; there is the potential for sensehiding and senseforcing to ebb and flow between the two phases in the pursuit of the more powerful subgroup's agenda, as I indicate below.

Board dynamics

In this phase, decisions are averted from ever being tabled at a board meeting through not allowing the underlying information to be brought out into the open from meetings away from the company boardroom.

Information flow

The agenda is firmly in the hands of the actors with the greatest economic power, with little or no input into the debate by the less powerful actors, and any information flow is intra-subgroup and not between subgroups.

Language and interpretive tasks

There is no shared action or interpretive tasks between groups, as the group with the greater economic power (the investor directors) seeks to exert influence by hiding their position from the group with the weaker economic capital (the entrepreneurial managers), by not declaring their views until a later board meeting, and then senseforcing again. All interpretive tasks are now dependant on whether there is any trust remaining. If the two subgroups are so untrusting of each other, then it will be unlikely that a balanced and efficient board will function again with the current board members.

4.5.5 Encapsulated sensemaking in general

Information flow, board dynamics and interpretive tasks all interact. If information flow is not mutual, this affects the interpretation and the shared meaning to emerge, affecting the proceedings of the board meeting. Mistrust between the subgroups grows as the phases of sensebreaking, sensefreezing, senseforcing and sensehiding progress. Once sensehiding is reached, there may be a move back to senseforcing and these phases interplay in an attempt of the more powerful investor directors reinforcing their position.

I now turn from the phases of encapsulated sensemaking to those observed in open sensemaking.

4.6 Open sensemaking

In analysing episodes involving both encapsulated and open sensemaking, I observe different phases that make up each process. In coding the open sensemaking episodes (the first episode at Drugtech, the first episode at Pharmadev and the first few weeks of the first episode of Medco before the process moves into encapsulated sensemaking) it becomes evident that few of the activities viewed in the encapsulated sensemaking episodes are present. Instead, other activities are evident during open sensemaking. It is evident from the empirical data that there is less need for sensegiving initiatives in open sensemaking, predominantly because there is little need to attempt to influence when the board becomes unanimous in its understanding of the problems and solution of the episode. In these episodes, I observe other phases (accommodating, comprehending, positioning and accepting) which are illustrated in Figure 4.2 below:

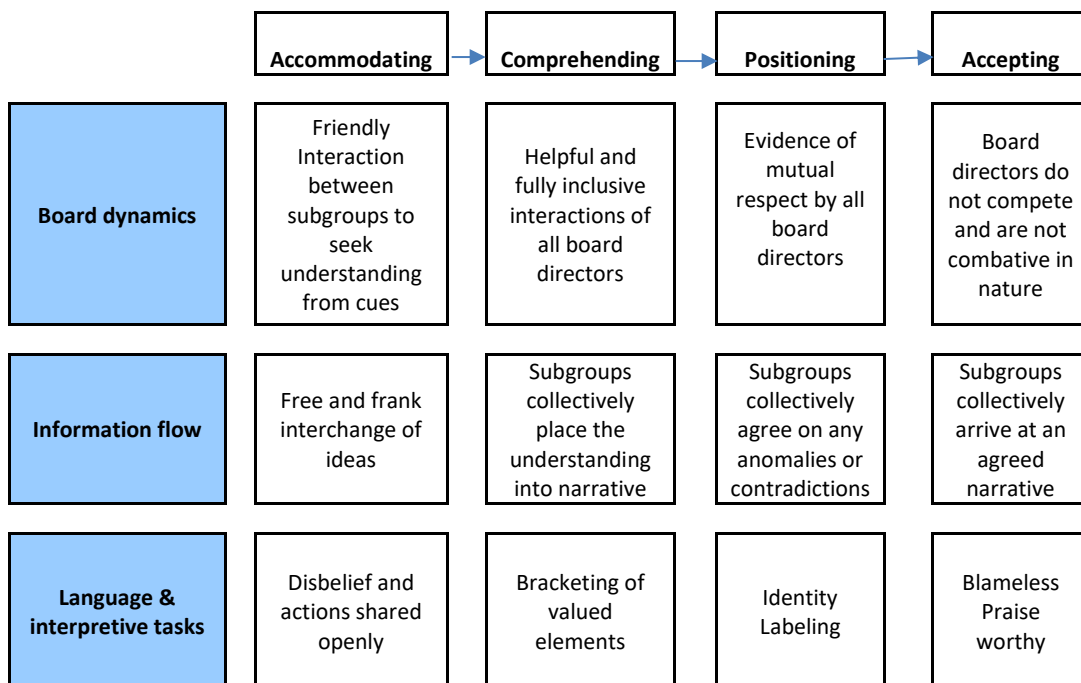


Figure 4.2: A process model of open sensemaking in entrepreneurial ventures

These phases are common across the open sensemaking cases as noted in Table 4.8 below, which lead to new company objectives and goals, resulting in a refreshed strategic direction. I explore these phases below.

	Drugtech Episode 1	Pharmadev Episode 1	Medco Episode 1 (in part)
Accommodating	Board 1	Boards 1 & 2	Board 1
Comprehending	Boards 1 & 2	Board 3	Board 1
Positioning	Board 2	Board 4	N/A
Accepting	Board 2	Board >5	N/A

Table 4.8: Timing of open sensemaking phases

Note: The board of Medco moved from open sensemaking to encapsulated sensemaking after the comprehending phase of open sensemaking. The term “Board” is short for board meeting

I present illustrative quotations from the open sensemaking phases as Tables 4.9 - 4.11 below, followed by a discussion of each of the open sensemaking phases:

Dimension	Illustrative Quotations
Accommodating	<i>"This turned out to be a road block rather than just a car crash in the road. So he {the CEO} dealt with the investor" NED</i>
<i>Board dynamics</i>	<i>"Conversations were pleasant, friendly, spontaneous and wide ranging" CSO</i>
<i>Information flow</i>	<i>"I learnt in a prior appointment as a venture capitalist to keep the investors well informed" CEO</i>
<i>Language and interpretive tasks</i>	<i>"All options were open to the company" CSO</i>
Comprehending	<i>"Before we went to the board with the recommendation we already had a pretty good idea that it would make a lot of sense to develop the drug alternatively through an antimicrobial route" CSO</i>
<i>Board dynamics</i>	<i>"The board appeared to act in unison" CSO</i>
<i>Information flow</i>	<i>"The meeting ended in a constructive manner" CEO</i>
<i>Language and interpretive tasks</i>	<i>"They reanalysed and reanalysed and kept coming to the same conclusion" CEO</i>
Positioning	<i>"I don't think there was hostility from investor directors at all" CSO</i>
<i>Board dynamics</i>	<i>"The board was held in a constructive manner" CEO</i>
<i>Information flow</i>	<i>"The board was held with constructive debate" NED</i>
<i>Language and interpretive tasks</i>	<i>"One of the toxicologists stated why don't we consider switching the programme to a topical application" CSO</i>
Accepting	<i>"We should re-focus our work on the drug as an antimicrobial used topically and all agreed" NED</i>
<i>Board dynamics</i>	<i>"The board was held in good spirits and with continual mutual respect and free exchange of ideas" Chair</i>
<i>Information flow</i>	<i>"And I think the idea of switching to a topical was almost born in the meeting room and the conversation" CEO</i>
<i>Language and interpretive tasks</i>	<i>"The relationship remained effectively unchanged with swift consensus and no apportioned blame" NED</i>

Table 4.9: Illustrative evidence-Drugtech first sensemaking episode

Dimension	Illustrative Quotations
Accommodating	<i>"Everybody regarded the company at that time as a disaster waiting to happen due to lack of strategy and direction" Ex Chair</i>
<i>Board dynamics</i>	<i>"There was lots of support from current investors" Ex Chair</i>
<i>Information flow</i>	<i>"He (the investor) agreed with the CSO who was very frank about the existing team" Inv Dir</i>
<i>Language and interpretive tasks</i>	<i>"I could not believe that the business was in position it was" Ex Chair</i>
Comprehending	<i>"This is a business that is about to go broke" Ex Chair</i>
<i>Board dynamics</i>	<i>"The Chair's transition out of the company was not difficult or contentious" COO</i>
<i>Information flow</i>	<i>"It wasn't accepted technology and it wasn't accepted science, so it was a struggle" CSO</i>
<i>Language and interpretive tasks</i>	<i>"The new Chair worked with the scientists" CEO</i>
Positioning	<i>"We knew how much we would spend to get to point A. We knew by this month we would achieved that particular goal" CSO</i>
<i>Board dynamics</i>	<i>"I worked with the scientists, not against them" Ex Chair</i>
<i>Information flow</i>	<i>"Everybody needed to agree on a new Chair, and openly debated the subject" CEO</i>
<i>Language and interpretive tasks</i>	<i>"No viable business plan which must be addressed within days to build infrastructure" Ex Chair</i>
Accepting	<i>"We suddenly became a team with an agreed new set of goals and direction, with the shareholders, the executives, and to add to that the people working in the company, the scientists" CSO</i>
<i>Board dynamics</i>	<i>"None of the staff now worked against each other" Ex Chair</i>
<i>Information flow</i>	<i>"The scientific staff in the company always felt the deadlines were too tight. The nice thing was he consulted them rather than imposing deadlines and they reacted very well to that" CSO</i>
<i>Language and interpretive tasks</i>	<i>"The transition of the company was not contentious" Ex Chair</i>

Table 4.10: Illustrative evidence-Pharmadev first sensemaking episode

Dimension	Illustrative Quotations
Accommodating	<i>"It became apparent to all that there was an increasing adverse variance of actual sales to budget"</i> CEO
<i>Board dynamics</i>	<i>"I observed good balance of the board"</i> Chair
<i>Information flow</i>	<i>"There was frank discussion across the whole board"</i> CSO
<i>Language and interpretive tasks</i>	<i>"The Chair observed a well functional board with shared responsibilities and actions across the whole board"</i> Chair
Comprehending	<i>"All directors agreed that the problem was lack of growth"</i> CEO
<i>Board dynamics</i>	<i>"Bringing the CEO in had a positive effect around the board table"</i> Chair
<i>Information flow</i>	<i>"The business got off to a great start with a very strong academic influence and free exchange of information"</i> CEO

Table 4.11: Illustrative evidence-Medco first sensemaking episode

4.6.1 Accommodating

I first examine how the triggers of open sensemaking, noted in Table 3.2, lead to the first stage of the open sensemaking process, that of accommodating. This phase involves reaching a consensus about "what the problem is", and it may also involve the changing of understanding through interaction among all actors and director subgroups in an inviting and inclusive environment.

The start of the open sensemaking process is the sensemaking trigger, which could be the company missing revenue targets (Medco), missing breakeven points (Pharmadev) or even receiving an unexpected scientific result (Drugtech). Like the triggers that lead to encapsulated sensemaking, all the triggers to the open sensemaking process are serious enough to potentially cause significant harm to the company if left unaddressed. Accommodating involves unfettered and free debate between subgroups to understand the nature of the challenge and scope of the problem. Although the trigger causes concern and surprise, this does not lead to a combative environment, unlike sensebreaking which is combative. At Medco, although the episode starts with open

sensemaking, as evidenced through free and frank exchanges to define the problem, these exchanges started to resemble those seen in encapsulated sensemaking when a single problem could not be defined. This led to an attempt to produce a solution to solve several different problems all at once, which became problematic for the board.

The sensemaking triggers are all unexpected and not desired: *“There was denial and unbelief when the company missed its key revenue target”* (COO, Medco, first episode 2013). This produces an initial reluctance to believe these triggers but this disbelief interferes with the immediate need to accept the problem and address it as expressed by the ex-Chair of Pharmadev: *“The business found itself in an unbelievable position”* (Ex Chair, Pharmadev, first episode 2012). In the case of Drugtech, this involved a reanalysis of the scientific results followed by a meeting with the supplier of those results, who is an outsourced provider:

After further deliberation and still in a spirit of unbelief, it was decided a team should visit the outsourced provider to assess whether the results could be wrong or if not, what would be the optimal way forward (CSO, Drugtech, first episode 2009).

Overall there is free and frank conversation both intra and inter-subgroups of directors, and the problem is ultimately agreed by all without any alternate options, enabling a coordinated base line for the next stages of the process as exemplified by the investor director at Pharmadev: *“He (the investor) agreed with the CEO concerning the past mismanagement of the company”* (Inv Dir, Pharmadev, first episode 2013). This is a key part of this process as it is essential to reach a consensual definition of the problem, whilst maintaining the trust and respect required in maintaining open sensemaking.

Board dynamics

The boards are conducted in a pleasant and friendly manner, with regard and respect for the views of other directors as exemplified by the Chair of Medco: *“I observed appropriate and focussed behaviour within the board”* (Chair, Medco, first episode 2013).

Information flow

To move towards solution creating, it would appear essential to avoid the risk of flipping to encapsulated sensemaking by keeping communication channels open with the timely passage of information as expressed by the CEO of Drugtech: *“I kept the investor directors and investors well informed at every stage in the process”* (CEO, Drugtech, first episode 2009).

Language and interpretive tasks

Accommodating, as described above, is seen in both open and encapsulated sensemaking and the starting point of accommodating is a need to accommodate multiple views to diagnose the problem. These initial interpretive tasks may take a few days to work through, however, in all three cases, such tasks take no longer than one week and end quicker than the initial interpretive tasks within the process of encapsulated sensemaking. The first stage of encapsulated sensemaking (sensebreaking) also commences with the same activity as observed in accommodating, the accommodation of multiple views to diagnose a problem. As soon as trust is lost and the presentation of material from one subgroup cannot be reconciled to the view of the world by another subgroup, then accommodating moves to sensebreaking, in an attempt to create a void of meaning, through no longer considering sense other from their own subgroup.

4.6.2 Comprehending

Once the problem is agreed, the next stage is seeking an understanding of the component parts of the solution: *“It took me about ten minutes to understand the numbers”* (Ex-Chair, Pharmadev, first episode 2012). Even though this challenge seems severe with potentially terminal consequences, the entire board works together to figure

out a route map to turn the business around: *“We all worked well together to work it out”* (CSO, Pharmadev, first episode 2012). This process of figuring out involves all directors and allows for uninhibited input of ideas and suggestions to formulate the new strategic plan, regardless of the Chair retiring: *“The Chair at this time was seeking to retire and he was helped”* (CSO, Pharmadev, first episode 2012). This comprehending phase results in a new plan with commercial goals agreeable to the scientists also: *“The new Chair imposed commercial deadlines for the first time”* (CEO, Pharmadev, first episode 2012). In the case of Drugtech, accommodating leads to the realisation that there was a potential solution, namely transferring to a topical drug development programme, but it needs analysing to assess its feasibility:

The CEO took some soundings from key stakeholders (including the investors) before we presented the board paper suggesting a change of plan (CSO, Drugtech, first episode 2009).

Comprehending involves seeking an answer to the question: What are the component parts of the solution and are they feasible?

Everybody agreed that the products were not penetrating the market sufficiently, and therein lies the solution – the question is can growth be pursued? (CEO, Medco, first episode 2013).

Board dynamics

The board of directors are individually and collectively helpful in assessing whether the component parts of the solution are feasible through helpful exchanges of information: *“The investment directors must have been quite helpful”* (CSO, Drugtech, first episode 2009).

Information flow

In the comprehending phase, there is continuation of free and frank exchange of helpful views and ideas as: *“The key personnel of the outsourced company and the company*

management and consultants agreed” (CEO, Drugtech, first episode 2009). Exchange of information takes place between subgroups and involves all members of the board.

Language and interpretive tasks

The directors who are aware of a potential route to a solution are engaged in the interpretive task of bracketing. Bracketing the problem as uncontrollable in the scientific sense (the outcome could not be predicted) opens the possibility of solutions further down the process; as the diagnosis of the problem has been agreed and prognosis can begin. This may result in the conclusion that the solution lies in changing course: *“The continuation of the programme was just too risky for a small company to consider”* (CEO, Drugtech, first episode 2009). Bracketing assists in further understanding the problem and setting up potential solutions and, in doing so, sets the scene for continuing to the next stages of the process, which is the prognosis, commencing with the positioning phase, described in the next section. Understanding the component parts of any putative solution (i.e. comprehending) is an essential phase prior to refining these views towards consensual decisions.

4.6.3 Positioning

The positioning phase involves debate in working towards a consensual solution and board resolution. Once the potential solutions are defined and understood, the next stage commences with the process of positioning debate and argument to work towards a consensual solution. In the case of Drugtech, the question becomes: The toxicology tests were valid, and although unpredictable, can the drug candidate still be developed into a medicine, or if not, should the drug development cease? The evidence suggests moving towards transferring to the topical programme. In Pharmadev, the whole board agrees that the board members and the scientists are aligned: *“It was convincing because there were numbers to back up the science now”* (CSO, Pharmadev, first episode 2012).

The interaction between all directors and outside parties, where useful, produces a wide spectrum of sources to search for a solution. This may result in more than one option, for example in the case of Drugtech, the options are to find an alternate drug development administration to develop the drug candidate as a medicine or to discontinue drug development entirely and close the company:

A discussion was held around the new topical market size and competitor landscape, new costings, contingencies and challenges (CEO, Drugtech, first episode 2009).

In the case of Medco, this would mean moving to a new strategy and plan with immediate effect. In the case of Pharmadev, this involves changing the Chair of the board, however, as is often the case, this is not combative: *“The subcommittee of investors agreed that good men with personal gravitas were hard to come by”* (CEO, Pharmadev, first episode 2012).

Board dynamics

At this stage, the board of directors show mutual respect to each other in acknowledging their various positions, which is necessary for a fair assessment of which option would provide the optimal solution: *“The Chair {new} worked with the scientists collaboratively”* (Ex-Chair, Pharmadev, first episode 2012). This is the same board dynamic as prior phases.

Information flow

Information flow is freely exchanged between subgroups with ideas and value being added by all actors; the same information flow is observed as in previous phases.

Language and interpretive tasks

In their search for the optimal solution, the entrepreneurial managers typically engage in the interpretive task of labelling involving *“stabilising the streaming of experience”* (Weick *et al.*, 2005 411) by socially constructing identity labels (Corley & Gioia, 2004). Labelling

involves expressing possible solutions and what they achieve, for example, the abandonment of a systemic development in favour of the development of a topical administration. Labelling is an effective way of communicating to others (the rest of the board and investors), making it clear why some new opportunities are being pursued and others abandoned. This phase often involves forming the new mission statement and re-orienting the company's goals and these tasks are clearly observed in the case of Drugtech.

4.6.4 Accepting

The final component of the open sensemaking process involves accepting the execution of an outcome through the reconciling of data, suggesting and discarding of data to arrive at the production of a sole narrative of the episode: *"We should abandon the use of the compound as a systemic drug"* (NED, Drugtech, first episode 2009), which was universally agreed around the board table.

In the case of Pharmadev, the company transitions from a company that is going bust to a company with a viable and sustainable business model and there is agreement in the formation of a new strategy: *"The transition of the company had to be engineered"* (Ex-Chair, Pharmadev, first episode 2012). As seen throughout the open sensemaking process, everybody works together and not against each other.

Board dynamics

The production of a sole narrative explaining why the sensemaking trigger happened and a route to re-aligned objectives and goals enables the board to consider a consensual decision which is not difficult to adopt, as they are acting in unison: *"Everybody wanted to get a result"* (Ex-Chair, Pharmadev, first episode 2012).

Information flow

All board actors at this stage appreciate the collective nature of gleaning sense from all actors around the board table, and they share information freely.

Language and interpretive tasks

At the end of the accepting phase, there is little by way of interpretive tasks other than praiseworthy attribution: *“Everybody worked well together”* (CSO, Pharmadev, first episode 2012), which allows for an efficient board process when the next strategic decision is required. This is even the case in often contentious situations, such as during change: *“The transition of the company was not difficult”* (CSO, Pharmadev, first episode 2012). The use of open sensemaking may increase the likelihood of subsequent open sensemaking and helps build trust.

4.6.5 Open sensemaking in general

As stated in encapsulated sensemaking; information flow, board dynamics and interpretive tasks all interact. But unlike in encapsulated sensemaking; during open sensemaking, information flow is mutual which allows for a collective sharing of interpretive tasks with all directors freely and frankly expressing their points of view. I define these new components in the Glossary as evidenced from the above empirical data, as follows:

Accommodating phase

Unfettered debate between subgroups to understand the challenge and scope of the problem.

Comprehending phase

Seeking an understanding of the component parts of the solution.

Positioning phase

Debate in working towards a consensual solution and board resolution.

Accepting phase

Agreement on the execution of an outcome through suggesting, discarding and reconciling information.

4.7 Discussion

I commenced this Chapter with a critique to the way sensemaking has been treated in the literature, and focused on the critiques that my findings seek to address; the need for greater clarity around the sensemaking process, context, language and behaviour, power and politics and the retrospective versus prospective nature of sensemaking. The first issue I consider is the need for greater clarity around the sensemaking process and in doing so, I elaborate the phases of encapsulated and open sensemaking.

In all encapsulated sensemaking episodes, I observe the presence of multiple interpretations of the trigger accompanied by sensegiving initiatives that progress the company towards failure. Due to the multiple accounts, individual board members could not find communal plausible solutions from a collective understanding of past events. I suggest that for collective sensemaking to occur, board members need to be able to reconcile information before agreeing a plausible solution. My analysis of the encapsulated sensemaking process suggests that to create order, economically powerful actors employ various sensegiving strategies to align the board members, rather than pursuing a more consensual approach. Specifically, due to differing interpretations of the sensemaking trigger, investor directors with stronger economic capital attempt to give sense to other board members with weaker economic capital who are reluctant to accept the proffered option as plausible. I argue however that the use of economic capital and power dynamics may be antagonistic to consensual decision-making within the sensemaking process, further considered and discussed in Chapter 6. I identify two sensegiving components that are overlooked in the literature, sensefreezing and senseforcing, as defined in Chapter 1. Sensebreaking, sensefreezing, senseforcing and sensehiding are all important sensegiving initiatives and are prospective (sensebreaking and sensehiding have already been identified as prospective by Gioia & Chittipeddi (1991)), challenging the retrospective view of sensemaking as suggested by Weick

(1995). These initiatives appear to cumulatively inhibit positive sensemaking and hence the restoration of order, which I identify as senseblocking (refer to the Glossary). Among these initiatives, sensehiding may contribute to failure as trust among the board directors is damaged, and may be beyond repair. Sensebreaking occurs whilst there is still frank and open debate across the board table, albeit disagreement and posturing for position. As soon as sensebreaking moves to sensefreezing, there is a disengagement of conversation, a breakdown in the free passage of information from entrepreneurial managers (with weaker economic capital) to investor directors (with stronger economic capital) and *vice versa*, and a lack of shared interpretation and resultant agreed action. This lack of agreed action progresses to a forced interaction where the investor directors dictate to the entrepreneurial managers and diminish the input of the entrepreneurial managers, to such an extent that the entrepreneurial managers withdraw entirely from the debate. In the senseforcing and sensehiding phases, all shared actions once again abate and the subgroups look for meaning from within their subgroup and from outside parties (e.g. the investors and advisors). I examine in Chapter 5 the sources of encapsulation by considering the individuals that make up each subgroup and consider decision-making in Chapter 6 as an outcome from the types of sensemaking examined here, encapsulated and open sensemaking. The four phases of open sensemaking (accommodating, comprehending, positioning and accepting) all involve the passing of sense from all actors, irrespective of whether they belong to investor directors' or entrepreneurial managers' subgroups. This fully inclusive dialogue leads to swifter consensual decision-making (further considered in Chapter 6), with board directors that have been given the opportunity to express their views openly and freely. The board environment encourages the interchange of free and frank ideas. There is no or little need for compiling competitive argument because narratives are built in a consensual and social manner. There is little requirement for power initiatives to be employed as

actors reach their required acceptable narrative of the episode, with options for solutions, without the need to attempt to influence. Outside parties are only used to complement or verify the narrative, rather than to oppose or deny it. Sensemaking is swift (taking months, not years) with no blame tactics or a lengthy search for plausible options to close the gulf. It is possible that through this entire open sensemaking process, the social need to make sense commences immediately and depending on the deemed severity and urgency, sensemaking can close the gulf in the agreement and delivery of new goals. In open sensemaking, the more traditional characteristics of social sensemaking as proffered by Weick (1995) hold. In my study, consensual decision-making is the outcome of open sensemaking and is a swifter process than outcomes of encapsulated sensemaking. When encapsulation occurs, the time of decision-making or indecision is extended often from months to years. This may be due to the social aspects becoming anti-social through subgroups only gleaning sense from their own subgroups and blocking sense extended by other subgroups and extra time is also needed to process newly introduced often conflicting data. These aspects are further considered in Chapter 6.

I specifically take certain challenges from Sandberg & Tsoukas (2015) in which I believe I have met the challenge. I have already considered the process itself and now consider the issues of context, language and behaviour, power and politics and finally retrospective versus prospective sensemaking. Thus, in this Chapter, I respond to Sandberg & Tsoukas's critique of the sensemaking literature for overlooking the process of sensemaking. By elaborating the various phases of encapsulated and open sensemaking, I am therefore able to contribute to the sensemaking literature (See Chapter 7).

Context

I state in the theoretical background to this Chapter that Sandberg & Tsoukas suggest that very few studies have empirically investigated how the influence of broader

institutional contexts (historical, cultural, epistemic, industrial etc.) is crucial for sensemaking efforts. I provide further empirical data to support the contextual nature of sensemaking. I highlight the effect subgroups have on entrepreneurial ventures (the investor directors and entrepreneurial managers) with varying degrees of power (further examined in Chapter 6). In all encapsulated sensemaking episodes within this study, I observe powerful actors (the investor directors) initiating power game initiatives in the form of sensegiving initiatives to force their agenda. It may alter this board dynamic if the investors did not appoint investor directors and allowed the entrepreneurial managers, whom they have invested in to direct the board or alternatively employ a Chair who could mediate and either direct the board away from encapsulated sensemaking to open sensemaking, or endeavour to maintain an open sensemaking environment. I consider this scenario of Chair mediation of the board in Chapter 6.

Language and behaviour

I state in the theoretical background to this Chapter that language and behaviour through interpretive tasks are important for gaining a holistic and coherent interpretation of the observed sensemaking episode. During encapsulated sensemaking, language progresses from persuasive language during sensebreaking to provocative and dictatorial language during sensefreezing and senseforcing; and eventually debate and arguments are not heard between subgroups during sensehiding. In contrast, the language during open sensemaking is pleasant, polite, respectful and inquisitive in nature throughout all the phases. Behaviour through interpretive tasks in encapsulated sensemaking is initially between subgroups at the sensebreaking phase, moving to intra-subgroup at the sensefreezing phase, followed by a paralysis of the interpretation of tasks at the senseforcing phase as entrepreneurial managers view the tasks as purely imposed with no allowance for their interpretation. Finally, there is the task of attempting to build trust during encapsulated sensemaking episodes which fails in all cases in this

study, leading to a breakdown in board relations through the irreparable mistrust generated between the subgroups, commencing at the sensefreezing phase and leading into the later phases of senseforcing and sensehiding. In contrast, the interpretive tasks during open sensemaking involve subgroups gleaning sense from all directors, leading to a praiseworthy or blameless re-orientation of company goals as the outcome of the sensemaking episode.

Power and politics

I state in the theoretical background to this Chapter that Drori & Ellis (2011) depicted how conflict and power relations are ubiquitous to sensemaking and note that *“multiple uses of sensegiving may well serve the interests of a management that pursues an inertia strategic path bolstered by internal hegemony and interests, even at the expense of better business practices and strategies”*(15). From this study during encapsulated sensemaking episodes, inertia is observed as bolstered by internal hegemony and in the interests of one subgroup, the investor directors, who inadvertently use sensegiving initiatives in this manner. However, the entrepreneurial managers are not swayed as they have effectively had their voices silenced, and so inertia replaces any momentum around the board table to attain a consensual strategic decision. As power games, through sensegiving initiatives, are so prevalent in encapsulated sensemaking, I revisit this relationship in Chapter 6 to further understand the use of power in encapsulated sensemaking. In contrast, power game initiatives are rarely observed during open sensemaking episodes as there is no requirement to influence as individual subgroups freely interact with each other. The board moves forward to consensual decisions with an acceptance of ideas and positions to form the new set of direction and goals, which the board of the company is able to adopt as the new strategic plan.

Retrospective versus prospective sensemaking

Increasing sensegiving initiatives by strong powerful subgroups of actors are proactive steps and hence prospective in nature. I believe that I have identified further prospective steps in adding the two new phases to encapsulated sensemaking, namely sensefreezing and senseforcing. Whereas sensemaking appears to be retrospective in its nature during open sensemaking, this does not hold during the episodes of encapsulated sensemaking. Further work is required in this area and I consider this in Chapter 7.

4.8 Conclusion

As well as the specific challenges above, Sandberg & Tsoukas (2015) state also the four general areas in their critique of sensemaking that require addressing which are as follows: Firstly, *“there requires further work on process as the notion remains relatively vague”*(20); secondly, *“the concept of sense is insufficiently developed”*(20); thirdly, *“sensemaking overlooks the larger context in which it takes place”*(20) and finally, *“sensemaking reduces reality to subjective understanding”*(20). I have considered new components for both encapsulated and open sensemaking and, in doing so, have added to the sensemaking literature, and removed some of the vagueness and further developed the concept of sense leading to positive and negative outcomes. I have sought to obtain some clarification of the process with an acknowledgement that there is much work still to be done in this area. I have outlined as much around the disruption of sense as around obtaining sense and have indicated that most sensegiving initiatives within encapsulated sensemaking lead to disruption, paralysis or obstruction to decision-making. In contrast, I have shown that no or limited sensegiving is used in open sensemaking and there is more likelihood of consensual decision-making as a result. These findings are in the context of entrepreneurial ventures, where investor directors have joined the company board at the request of the investor, and such context leads to

episodes of encapsulated, as well as open sensemaking. I believe that the critique of sensemaking, reducing reality to subjectivity, is an intrinsic part of sensemaking as it stems from actors who are all taking subjective views of their world, and aligns with sensemaking being more about plausibility than accuracy.

I have considered the relationship of power and sensegiving initiatives and believe such knowledge is useful to practitioners, considered further in Chapter 6. Although this research has sought to unpack the process of sensemaking, sensemaking is context specific, hence the generalization of findings cannot be extended to other contexts. I consider further limitations and further work in Chapter 7.

The Weickian view (1993) of sensemaking involves the restoration of order from chaotic situations, however this view cannot be universally applied to all sensemaking processes. The Weickian view, as is evident from the evidence presented here, aligns with open sensemaking processes within the context of entrepreneurial ventures restoring goal congruence from equivocal positions. The restoration of order is observed in the cases where open sensemaking was observed, consistent with the definition of sensemaking:

A process prompted by violated expectations, that involves attending to bracketing cues in the environment creating intersubjective meaning through cycles of interpretation and action and thereby enacting a more ordered environment from which further cues can be drawn. (Maitlis & Christianson 2014 11).

I suggest that this definition is more applicable where open sensemaking is employed, as opposed to encapsulated sensemaking, as borne out by my data and analysis. I observe very different sensemaking phases in encapsulated sensemaking in the context of entrepreneurial ventures, which eventually lead to terminal decline. The distinction between encapsulated and open sensemaking is important as understanding the phases of these differing types of sensemaking lead to new process models. As stated in the

Introduction, this is of interest not only in advancing scholarly knowledge, but also with the aim of discovering a more effective board process leading to more efficient decision-making processes.

CHAPTER 5: SENSEMAKING AND FAULTLINES IN ENTREPRENEURIAL VENTURES

5.1 Introduction

In this Chapter, I seek to develop a deeper understanding of the nature of faultlines (in terms of activation and strength) in entrepreneurial venture boards and the relationship between these faultlines and sensemaking.

I consider numerous definitions of sensemaking in the introduction to this thesis and have settled on the following definition as the most appropriate for this study: *“A process prompted by violated expectations, that involves attending to bracketing cues in the environment, creating intersubjective meaning through cycles of interpretation and action and thereby enacting a more ordered environment from which further cues can be drawn”* (Maitlis & Christianson, 2014 11). Actors in entrepreneurial ventures need to deal with uncertainty as part of the decision-making process in response to adverse deviations from the business plan and, once a decision is made, the cycle of sensemaking may continue if ambiguity remains: *“Sensemaking both precedes decision-making and follows it, providing the clear questions and clear answers that feed decision-making”* (Weick, 1993 636). Decision-making and the speed of decision-making are particularly important in dynamic, rapidly changing environments (Forbes, 2005). If there is a lack of or protracted decision-making, leading to lengthy periods before a decision is made, the venture is more likely to exhaust its limited resources, often in the form of its investment, and effectively fail. Decision-making is considered in depth in Chapter 6, but it is introduced in this Chapter, as both sensemaking and faultlines are important to understand further as precursors to decision-making. In the previous Chapter, I explored different types of sensemaking (encapsulated and open) by entrepreneurial venture boards and in this Chapter, I seek to understand the relationship between sensemaking and faultline activation and strength. Since whether sensemaking is open or

encapsulated can influence venture outcomes (positively and negatively retrospectively), and hence it is important to understand the antecedents. One antecedent that inductively emerged from my empirical analysis was faultlines. Faultlines are hypothetical dividing lines that split a group into two or more subgroups based on one or more individual attributes (Lau & Murnighan, 1998; Bezrukova *et al.*, 2009). Lim, Busenitz & Chidambaram (2013) consider entrepreneurial ventures within the context of faultline discussion and propose that new venture teams often comprise idea-conceiving founders and equity-based investors, and that such subgroups represent a faultline. These subgroups are often represented at board level with investor directors representing the investors and entrepreneurial managers representing the management of the company. The presence of faultlines can arguably increase the likelihood of encapsulation because encapsulation involves engaging with those in one's own subgroup at the expense of those outside of the subgroup. Indeed Thatcher & Patel (2012) suggest:

One aspect of the original faultline conception that has largely been absent from the literature on faultlines is the idea of sensemaking. It is unclear how the sensemaking process is developed, reinforced or weakened through subgroup and group-level routines and exchanges (993).

Interestingly in my research, I found that despite the presence of latent faultlines, some boards engage in open rather than encapsulated sensemaking. However, I found that the sensemaking occurring in a venture board influenced the nature of the faultlines themselves. Intrigued by this relationship, in this Chapter I explore this relationship between sensemaking and faultlines. I am interested in the research questions: What is the nature of faultlines in entrepreneurial venture boards? And how do faultlines promote encapsulated and open sensemaking in entrepreneurial venture boards? The inductive analysis of three entrepreneurial ventures suggests that the presence and nature

(activation and strength) of faultlines may influence the type of sensemaking engaged by entrepreneurial venture boards. In this Chapter, I use the three theories of sensemaking, faultlines and Bourdieu's theory of practice, to explain the relationship between sensemaking and faultlines. I review these theories and then follow this with the empirical settings and methods, research context and study design, data collection and analysis, concluding in a discussion, and a new model describing the link between faultline activation and strength and the encapsulated sensemaking process.

5.2 Sensemaking and faultlines

Venture capital backed entrepreneurial ventures are governed by boards of directors. As stated in Chapter 1, these boards initially include idea-conceiving founders but they may later incorporate owner managers (entrepreneurial managers) and representatives of the equity-based investors (investor directors). In the context of entrepreneurial ventures, a key challenge for a venture capital backed board is to maximise its collective ability to produce optimal outcomes (strategic decisions) through an effective board process. This collective ability to make effective strategic decisions may be influenced by the diversity of the groups within the board.

Since Hambrick and Mason's (1984) seminal work, strategic management scholars have demonstrated the impact that the upper echelons of a firm (i.e. the top management team) can have on strategic decision-making and firm-level outcomes. Knippenberg *et al.* (2011) found that top management teams could have a negative effect on organizational outcomes if the members of the top management team did not all share the same objectives. In entrepreneurial ventures, strategic management of the business is carried out not only by the top management team but also by external board members. Some scholars have even referred to the board of directors in entrepreneurial ventures as the extended team (Vanaelst *et al.*, 2006; Knockhaert *et al.*, 2013). Alignment of the firm's objectives may be particularly challenging in those settings where investor directors

take their instructions from the investors and entrepreneurial managers from the board. The investors and investor directors may view the venture as part of a larger portfolio of investments and their prime goal is to generate a portfolio return, whereas the entrepreneurial managers may want to maximise the return from this individual investment and have little or no regard for a broader portfolio.

Over the past three decades, research on group diversity has focussed on the effects of group composition on group-level outcomes (Thatcher & Patel, 2012). An emerging line of research in this area, as introduced above, is that of group faultlines, which mainly draws on social identity theory. There has been increasing research interest in this subgroup formation, (akin to the subgroupings of directors on boards, i.e. investor directors and entrepreneurial managers) and the potential this should explain the dynamics caused by composition distribution (Mathieu, Maynard, Rapp & Gilson, 2008). While entrepreneurial managers and investor directors have received considerable research attention separately, only limited research (Lim, Busenitz & Chidambaram, 2013) has considered them as subgroups comprising the decision-making body of an entrepreneurial venture (i.e. the board). As already stated, Lim *et al.* (2013) consider entrepreneurial ventures within the context of faultline discussion and propose that new venture teams often comprise idea-conceiving founders and equity-based investors, and that such subgroups represent a faultline. These subgroups are often represented at board level with investor directors representing the investors and entrepreneurial managers representing the management of the company. Lim *et al.* (2013 48) suggest these two distinct subgroups are created around how the members structure the overall venture (structural dimension) and how they view it (cognitive dimension). However, the authors do not drill down into the attributes of the individuals that make up the subgroups. Previously, the focus of faultline research had been to align demographic attributes (age, race, gender, *etc.*) to the hypothetical dividing lines that split a group (Thatcher & Patel,

2012 970). There has also been limited work on non-demographic attributes, which include the consideration of attributes such as personality and geographical work location. I suggest there is a need to move beyond demographic attributes to further our understanding of faultlines; e.g. their personal networks, education, culture, shareholding and attributed voting power. I have an interest in understanding such individual attributes of the individuals that make up the subgroups and in doing so, seek to add to the faultline literature through an assessment of their formation.

Evidence suggests faultlines affect group processes as well as affective and performance outcomes (Lau & Murnighan, 2005; Li & Hambrick, 2005; Barkema & Shvyrkov, 2007; Bezrukova *et al.*, 2009; Choi & Sy, 2010). Strong subgroup differences explain why faultlines have an influence on group processes and outcomes, however this is not deemed to be entirely due to diversity between groups. It is acknowledged that the time and energy spent in attempting to bridge the chasm created by a strong faultline means less time for and focus on meeting the group's goals (Li & Hambrick, 2005). Subgroups can also become competitive with each other (Brewer, 1996; Halevy, 2008) and communication hindrances prevent necessary knowledge exchange (Halevy, 2008). In my empirical work, I consider these subgroup attributes, focusing on the social, culture and economic capital introduced by each actor. This is explained more fully later in this Chapter when considering Bourdieu's theory of practice. Faultlines may have negative repercussions such as coalition formation and conflict on group outcomes (Chrobot-Mason *et al.*, 2009; Jehn & Bezrukova, 2010). Yet, there has been some argument for the positive effects of faultlines. Bezrukova & Uparna (2009) argue that faultline presence may increase creativity, while Gibson & Vermeulen (2003) suggest that moderate faultlines may lead to an increase in group learning. The psychological support provided by subgroups may have positive benefits to individuals where strong faultlines can moderate the relationship between perceived injustice and individual outcomes (Spell *et*

al., 2011). However, these studies provide little insight into how faultlines emerge in the first place, and whether the sensemaking processes unpacked in Chapter 4 relate to these faultlines activation and strength.

A faultline is considered strong (Lau & Murnighan, 1998) if the following three conditions are met: Firstly, the subgroups within the group are of similar size; secondly, there is a high level of homogeneity across other attributes within each subgroup; and thirdly, there is a high level of heterogeneity between subgroups based on attributes; e.g. in one group there are females in their sixties and in the other there are males in their thirties. However, Thatcher & Patel (2012) suggest that the evidence has failed to consistently produce a combination of attributes making up a faultline that has a significant effect on group outcomes; a gap which I seek to address in this study. This is not a criticism of the attribute studies themselves, but a lack of attention to gaining a deeper understanding of the formation of faultlines. I use the above criteria in qualitatively assessing the relative strength of faultlines. Since my empirical study suggests that faultlines (including their strength) are influenced by individual actors' dispositions as shaped by their capital endowments, it is appropriate to consider Bourdieu's theory of practice.

5.3 Using Bourdieu to understand faultlines

Bourdieu's theory of practice concerns itself with the interactions between individuals, and extends the sense of the term "capital" by employing it in a wider system of exchanges, and in doing so moves away from the purely narrow instance of mercantile exchange (economic capital) to a wider scope of cultural and social capital (refer to Glossary). Bourdieu is not new to the literature on entrepreneurship (e.g. Anderson & Miller, 2003; De Clercq & Voronov, 2009; Bhugavalula *et al.*, 2010; Bloom & Smith, 2010), however Bourdieu's theory of practice has not been deployed to explain elements of faultline formation. As outlined above, faultlines have been identified in the literature by considering demographic characteristics that are merely a proxy for individual cognitions.

Bourdieu's theory of practice may capture individual cognitions more effectively and hence offer an alternate way of explaining faultlines by considering the individual group members' disposition, that is shaped by their capital, and which may in turn explain faultline formation.

Bourdieu's notion of capital and disposition may help explain how people see the world. Although Lim *et al*/consider cognition, they do so in the context of how members view the overall venture (2013 48) but not through the lenses of individual board members. Bourdieu identifies actors as being in unique social positions comprising their economic, cultural and social capital, as generated by decades of lived experience (Bourdieu, 1986). These combinations shape actors' dispositions towards the field (Bourdieu, 1988), and it is these dispositions that are actors' enduring schemes of perception (cognition), interpretation and action (Bourdieu, 1989) and in this context, exist mainly at the unconscious (taken for granted) level (Bourdieu & Wacquant, 1992). Bourdieu accounts for the structure and functioning of the social world by introducing three forms of capital (Bourdieu, 1986). The notion of *cultural capital* initially presented itself to Bourdieu as an explanation for the unequal scholastic achievement of children originating from the different social classes (Bourdieu, 1986). For Bourdieu, cultural capital encompasses a broad array of linguistic competences, manners, preferences and orientations, which Bourdieu terms the subtle modalities in the relationship between culture and language (Bourdieu, 1977). He views cultural capital as an embodied state that begins in early childhood and requires adults to sensitise the child to cultural distinctions. Institutionalised forms include educational qualifications and the objectified state, which stem from items such as books, paintings, artefacts, etc. Bourdieu views *social capital* as capital generated by networking through social processes, including networks between the family and wider society (Bourdieu, 1986), and sees *economic capital* as wealth inherited from interactions between the individual and the economy (Bourdieu,

1986). Bourdieu suggests that a form of capital could be converted to another, for example economic capital could be converted into cultural capital by buying an education. Within the context of entrepreneurial ventures, Bourdieu's three forms of capital can be considered as follows: Firstly, economic capital is expressed as power through property rights, often expressed by the degree to which an actor has rights of control through equity ownership, or through the representation of an investor. Actors' ownership of other investments also adds to economic capital. Secondly, cultural capital is represented as the actor's area of expertise; actors' educational background and their experience in the position that they have taken in the entrepreneurial venture are of relevance. Additional experience that may shape actors' cultural capital might include the extent of their financial expertise, commercial expertise and technological expertise. Thirdly, social capital is expressed as the nature of relationships that span the different domains of expertise. Within the context of entrepreneurial ventures, the networking of the actors is of relevance and will be considered in this study. Whereas Lockett *et al.* (2014) explore the multi-dimensional nature of social positions to examine how sensemaking is influenced by actors, I extend this work by using such positions to examine faultline formation, which I believe is an important and little researched area that is shaped by the extent and type of sensemaking.

In this Chapter, I empirically examine the sensemaking episodes following six adverse deviations from the business plan. I pay attention to the role played by sensemaking in shaping the faultlines that follows adverse deviations from the business plan. In so doing, I seek to extend the research on faultlines by considering the antecedent building blocks that lead to their formation. I aim to explain how different actors make sense of events in different ways and how the faultlines are shaped through this sensemaking. I also highlight the role and disposition of those people who span group memberships and their potential effect on sensemaking. In so doing I advance the work on faultlines, which is

largely based on demographic information and drawing on psychological work on cognition, to focus on the socio-cognitive issues associated with sensemaking.

5.4 Data and methods

5.4.1 Research settings, participants and data collection

The research setting, research participants and data collection are as per the methods section presented in Chapter 3.

5.4.2 Study design

The study of processes such as sensemaking involves observing and interpreting individuals and groups of homogeneous actors' accounts (their understanding of an unfolding story). This calls for a qualitative method (Isabella, 1990; Gioia & Thomas, 1996) with the potential to compare situations across similar case studies of comparable organisations. The present study meets these criteria where both retrospective and real-time sensemaking dynamics are followed (Gover & Duxbury, 2012). Semi-structured interviews were used in this study to collect and analyse the data. As proffered by Lim *et al.* (2013), the entrepreneurial managers (often the founders) and investor directors constitute two subgroups within boards of directors. In the second subgroup, there is often a proxy for the funders, in the shape of one or more investor directors that are appointed by the investor, to look after the interest of the investor. Although I acknowledge the above work of Lim *et al.*, I seek to induce the faultlines and groups from the data, as it may be that homogeneous subgroups differ in different cases. For example, the Chair could be an appointee under the investment agreement to act on behalf of the investor, or he/she could be independent, thus bringing additional skills to the company.

5.5 Data analysis and coding procedure

The data analysis proceeded through three cycles of inductive and deductive reasoning (*cf.* Hoffman & Ocasio, 2004; Gavetti & Rivkin, 2007). An initial review of the literature on

sensemaking led me to expect that rich episodes of sensemaking would follow substantial adverse deviations from the business plan in entrepreneurial businesses. My analysis of sensemaking during these episodes, however, revealed the presence of subgroups in the entrepreneurial ventures I studied, which in turn led me to explore the group faultlines literature which I had not reviewed at the start of this research.

The first round of analysis involved a fine-grained reading of the data, which Strauss & Corbin (1990) refer to as microanalysis. Narratives were then created for each of the three case studies with emphasis on periods when there was an observed adverse deviation from the business plan, as well as the sensemaking processes that followed. These narratives comprised a chronological depiction of events based on data derived from interviews, archival sources, correspondence and meeting minutes.

From these narratives, I built an initial list of themes and codes for data analysis. My interest was around capital and disposition and whether an episode contained open or encapsulated sensemaking. Faultlines were observed from the data and included in Table 5.7, where an assessment of their relative strengths could be made. The data were read multiple times to generate any further coding. The views of different stakeholders were integrated by using interviews, public documents, emails and other sources of relevance. The richness of the data enabled triangulation between these various documents to allow for refinement, critique and further interviewing if it became evident that further clarification and explanation was needed to piece together the chain of events.

In the second round of analysis, I began to theorise on the written longitudinal narratives. I proceeded to code these in an inductive manner, creating a set of largely empirical codes categorised as “open coding” (Strauss & Corbin, 1990). Open coding refers to analysis that deals with the labelling and categorising of phenomena as indicated by the

data. Subsequently, data are compared and similar incidents are grouped together under the same conceptual label.

The third round of analysis involved axial coding (Strauss & Corbin, 1990), which is a practice of structuring data into aggregate dimensions (Corley & Gioia, 2004). During this stage of analysis, the emphasis tends towards teasing out theoretical interpretations of the data contained in the empirical results. Table 5.1 details the data coding and structure employed in moving from the first order codes to the aggregate theoretical dimensions.

The fourth round of analysis involved temporal sequencing. This integrates all the previous rounds into a temporal explanation of actors' capital, dispositions and the sensemaking process, and differs from the first round in that the first round merely builds the story from individual data sources, and does not link the data into the theory. Although there can be many interpretations of events (Van Maanan, 1988), the rounds of analysis that were followed helped to avoid fitting the data to illustrate a theory (Wodak, 2004 200). Further, the approach taken constantly interrogated the three theories (faultlines, Bourdieu's theory of practice and sensemaking) along with the data generated throughout the study (Locke, 1996).

First-Order Codes	Theoretical Categories	Aggregate Theoretical Dimensions
Degree to which an actor has residual rights of control through equity ownership, or through the representation of an owner	Economic capital	Capital
Actors' ownership of other investments		
Background / role played by an actor (eg finance, scientist, commercial)	Cultural capital	
Jurisdictional calls on specialists' knowledge		
Evidence of actors' prior experience of creating economic wealth		
Diversity of relationships spanning different stakeholder groups	Social capital	
Awareness and understanding of the interests and perspectives of other professional groups	Allocentrism / egocentrism	Disposition
Perception of degree to which they were able to act independently of the influence of others		
The degree to which the actor's focal concern is defined by their role in the venture	Role orientation	
The extent to which the actor's orientation is to the venture (as opposed to other commitments)		
Statements about how actors worked through equivocal issues surrounding the sensemaking episode with other members employed in their role	Encapsulated sensemaking	Form of sensemaking
Statements about the influence of those in similar/same roles in shaping one's thinking about the sensemaking episode		
Evidence of actors forming subgroups and holding discussions behind closed doors		
Statements about how they worked through issues around uncertainty with a wide range of actors employed in different roles	Open sensemaking	
Statements about the diversity of people, across different roles, who shaped their thinking about the venture		

Table 5.1: Data coding for capital, disposition and sensemaking

5.6 Findings and analysis

My analysis of the episodes revealed a distinct set of common attributes for these groups of actors. I initially use Bourdieu to consider the capital and disposition of each actor, and I then consider whether I can group the actors based on such attributes as the degree of homogeneity across the grouping. Finally, I explore why any homogeneous groups based on capital as influenced by disposition may affect the faultline activation and strength and

the relationship between sensemaking and faultlines. Tables 5.2 - 5.4 detail the capital ascribed to each actor for both episodes within each company. Since Lim *et al.* (2013) have already suggested the potential for faultlines between entrepreneurial managers and investor directors; I started arranging the data in this manner and in doing so discovered homogeneity in some of the subgroups. Using the data from Tables 5.2 - 5.4, the following observations can be made in relation to the two homogeneous groups, with the Chair in some cases representing a distinct actor from the entrepreneurial managers and investor directors.

<i>Assessment of capital (in bold)</i>	Sensemaking Episode	Economic capital	Cultural capital	Social capital
Management Team				
<i>CEO (Ian Petersen)</i> LOW	1 & 2	No other investments LOW	First appointment in SME Biotech as CEO LOW	No network in Biotech LOW
<i>CSO (Jeffrey White)</i> MEDIUM	1 & 2	<10% shares/options and no other investments LOW	Academic opinion leader with PhD working for UK/US universities with commercial acumen HIGH	Network in academic circles MEDIUM
Investor Directors				
<i>Investor Director (Jeremy White)</i> MEDIUM TO HIGH	1 & 2	>25% voting rights plus power to enact typical venture capital covenants Responsible for other investments HIGH	From an investment and consulting background with no early stage direct business building experience MEDIUM	Possesses a strong network but not from within the industry MEDIUM
<i>Investor Director (Stephen Wright)</i> MEDIUM TO HIGH	1 & 2	>25% voting rights plus power to enact typical venture capital covenants Responsible for other investments HIGH	From an investment and consulting background with no early stage direct business building experience MEDIUM	Possesses a strong network but only within venture capital circles MEDIUM
Chair				
<i>(Peter Newall)</i> LOW TO MEDIUM	1	Did not possess the level of economic capital of the Investor Directors and <1% share options, but more influence than management team LOW TO MEDIUM	Retired from a multi-national, but no experience of SMEs other than non-executive appointments LOW	Had substantial network but outside this industrial sector MEDIUM

Table 5.2: Board capital in Pharmadev

<i>Assessment of capital (in bold)</i>	Sensemaking Episode	Economic capital	Cultural capital	Social capital
Management Team				
CEO (<i>Janet Smith</i>) LOW	1 & 2	<10% shares/options LOW	Graduate with MBA and 1st CEO appointment in SME branch LOW	No network in Biotech LOW
CSO (<i>Ian Smith</i>) LOW TO MEDIUM	1 & 2	<10% shares/options and no other investments LOW	Engineer and research degree, regulatory and compliance MEDIUM	Network in academic circles MEDIUM
Investor Directors				
Investor Director (<i>James Blunkett</i>) HIGH	1 & 2	>25% voting rights plus power to enact typical venture capital covenants HIGH	As well being financial astute, he also possessed experience through acting as both investor as well as CEO and CFO HIGH	Substantial network – commercial and investment-having being a CEO of a quoted company with a track record in successful investing HIGH
Investor Director (<i>Peter Northwick</i>) MEDIUM TO HIGH	1 & 2	>25% voting rights plus power to enact typical venture capital covenants HIGH	Undergraduate degree with a MBA, stemming from an investment background with no direct business building experience MEDIUM	Possesses a strong network but only within venture capital circles MEDIUM
Chair				
(<i>Hugh Mortimer</i>) LOW TO MEDIUM	1 & 2 (<i>part</i>)	Did not possess the level of economic capital of the Investor Directors and <10% share options, but more influence than management team LOW TO MEDIUM	Commenced life in the public sector, but swiftly moved to commercial roles and management of a corporate equity portfolio. He had not held prior Chair or CEO appointments in start-up ventures MEDIUM	Had substantial network but only within medical device circles MEDIUM

Table 5.3: Board capital in Medco

<i>Assessment of capital (in bold)</i>	Sensemaking Episode	Economic capital	Cultural capital	Social capital
Management Team				
CEO (Sebastian Petersen) LOW	1 & 2	<10% shares/options No other investments LOW	Graduate with ACA 1st CEO appointment in SME Biotech LOW	No network in Biotech LOW
CSO (Gerard Britten) MEDIUM	1 & 2	<10% shares/options No other investments LOW	PhD - Academic opinion leader working for UK/US universities HIGH	Network in academic circles MEDIUM
Investor Directors				
Investor Director (James White) MEDIUM-HIGH	1	>25% voting rights plus power to enact typical venture capital covenants Responsible for other investments HIGH	Legal background with no early stage direct business building experience MEDIUM	Already had a network but not within biotech circles MEDIUM
Investor Director (Ben Skilman) MEDIUM-HIGH	1	>25% voting rights plus power to enact typical venture capital covenants Responsible for other investments HIGH	PhD with a banking background. Little early stage direct business building experience MEDIUM	Possesses a strong network but only within venture capital and banking circles MEDIUM
Chair & Independent Director				
Peter Edmonson & Edward Gray (Independent Director) LOW-MEDIUM	1 & 2	Do not possess the level of economic capital of the Investor Directors and <1% share options No other investments LOW	Have backgrounds in science and management but not in entrepreneurial ventures LOW	Have substantial network but only within large pharmaceutical circles MEDIUM

Table 5.4: Board capital in Drugtech

In considering faultline presence and strength, I now consider whether patterns can be established across the subgroups. I then summarise these patterns in Table 5.7, where I consider the homogeneity and heterogeneity of the subgroups.

In terms of the entrepreneurial managers, it is evident the data strongly suggests a homogeneous subgroup with similar capital. The following is evident from the data: No one in this group has substantial economic capital and no one has enough voting power to prevent a special resolution being passed, which requires 75% voting rights; the value

of the shares they do possess have “hope” value (i.e. only have any significant value if future events turn out positively) and are not realisable until a sale; no one in the group possessed any investment capital in other unquoted companies when they entered the position; all possess high standards of educational attainment and hence high levels of cultural capital, and since the CEOs had little by way of an established network in the industry, the remaining management plugged this gap by providing access to academic and industrial relevant networks. The social capital is deemed homogeneous in that the subgroup covers academic and industrial networks and is therefore strong in academic and industrial circles, but is weaker in investment and funding circles.

In terms of the investor directors, the data strongly suggests a homogeneous subgroup with similar capital profiles: Everyone in this group has substantial economic capital; everyone has sufficient voting power to prevent the passing of a special resolution, which requires 75% voting rights; the voting rights of the shares they represent allow for actions that could substantially affect the management team, e.g. to enact covenants that may lose the management their entire shareholding; all have responsibility for other investments; all possess high standards of educational attainment, and hence high levels of cultural capital and all have extensive networks, albeit some only in the venture capital industry. Hence, they typically have stronger social capital in investment and funding circles than in industrial and academic circles.

The Chair stands out as distinct from these two subgroups. The literature review of the Chair is within Chapter 6 where the mediation role of the Chair is discussed further. The Chair must take the prime leadership position in attempting to obtain consensus in committing the company’s resource to a set course to meet the overall objectives of the company. A board can only become effective if organised as a collective decision-making body, and the Chair has a pivotal role in achieving this aim. A Chair has no statutory position and ranks equally in legal terms with all other directors. The Chair may be

brought in by the investors and investor directors or the entrepreneurial managers. The Chair cannot be deemed to be part of one of the other subgroups, due to the following: One of the Chairs (Medco) was appointed by the investor, one of the Chairs (Pharmadev) was appointed by a founder investor, namely the University, and the third Chair (Drugtech) was appointed by the company before venture capital had been raised; although none had significant holdings in the company that they chaired, the second had other holdings and the third had no other investments in unquoted venture capital backed companies; and all had differing cultural and social capital. The Chairs act and sometimes align with one subgroup or outside all subgroups due, in part, to the heterogeneity of their capital relative to the identified subgroups.

After consideration of the individual actors' capital, I now explain relationships between capital and disposition. The actors are influenced through their social positions, including dispositions in the form of egocentric or role-centric behaviour, or behaviour that stems from a disposition to think about others and to behave in relation to them, which is defined as allocentrism (Bourdieu & Wacquant, 1992; Lockett *et al.*, 2014). Allocentrism is the movement away from the natural egocentrism of the individual and results in a disposition to think about others and to behave in relation to them:

Allocentrism manifests itself in terms of movement from self-centred to decentred states on social, affective, moral, relational and cognitive dimensions (Thornberry, 1997).

Allocentrism may be of significance when considering the varying subgroups of the board. If an actor or group of actors observes events through the lenses of others, then there may be a greater potential for understanding the viewpoint of others, with a subsequent acceptance of a position that the board can adopt. Allocentrism is more available to actors who possess more diverse networks and a broader education, simply because they are exposed to differing views and a more comprehensive use of language

in differing contexts and culture, however this does not necessarily translate into allocentrism. Allocentrism can remain latent; this would be the case where an actor deems he does not need to act in such a way to achieve a decision that he believes to be the correct decision for the company. In contrast, egocentrism derived from Jean Piaget's 1951 theory of cognitive development refers to an inability to differentiate between the self and others (Anderman & Anderman, 2009). Table 5.5 following summarises the venture pursuit, due to the roles that the subgroups play and whether they are investor driven or enterprise driven and the ego/allocentrism of the identified subgroups induced from the data.

Case	Sub-group	Role orientation	Ego/allocentrism
Medco	Em	Sustainable venture growth	Egocentric
	Ids	Financial return and exit	Allocentric (1st episode) Egocentric (2nd episode)
	Chair	Financial return and exit	Egocentric
Pharmadev	Em	Scientists – sustainable venture growth (1st episode) Financial return (2nd episode)	Allocentric (1st episode) Egocentric (2nd episode)
	Ids	Financial return and exit	Allocentric (1st episode) Egocentric (2nd episode)
	Chair	Financial return and exit	Allocentric (1st episode) Egocentric (2nd episode)
Drugtech	Em	Sustainable venture growth	Allocentric CEO (1st episode) Egocentric (2nd episode)
	Ids	Financial return and exit	Egocentric
	Chair	Financial return and exit	Egocentric

Key: Em = Entrepreneurial managers, Ids = Investor directors representing investors

Table 5.5: Dispositions of board subgroups

5.7 Capital and disposition

As stated in the Introduction to this thesis: *“An entrepreneurial venture typically starts with a founder or founders who have an idea”* (Byers, Dorf & Nelson, 2010). During the initial stage of growth, founders may seek finance from their own resource or friends and family, and then seek external finance at a later stage in the form of venture capital (Cox, Katila & Eisenhardt, 2012). It is during these times of investment that boards appoint further directors to represent the interest of the new investors (Bagley & Dauchy, 2008). As the board increases after progressive investment rounds, the proportion of outside directors also increases (Lerner, 1995). Although it is more usual for an outside investor

to appoint an investor director, not all make such appointments (Kaplan & Stromberg, 2003) and further non-executive directors (of which investor directors are a subgroup) may be appointed due to their market, competitor or technical knowledge (Bagley & Dauchy, 2008). The investor directors have a primary role of protecting their investment and the entrepreneurial managers have a primary role of growing the enterprise value of the business guided by board decision-making. These roles in this context means sustainable venture growth is pursued by the entrepreneurial managers and financial return and exit is pursued by the investor directors. If the entrepreneurial managers are not founders, but parachuted into the venture by the investors, they act like investor directors. I bring out this relationship and explore relationships between individual actors' capital and disposition, such as ego/allocentrism. The reason for such an analysis is an attempt to understand whether links between certain types of actors' capital (economic, cultural and social) and their disposition affect the formation and strengthening of faultlines.

First sensemaking episode at Medco

In their drive for an exit, an acquisition target was identified by the company to attempt to purchase market ready products, which would accelerate the company's revenue growth and make it look more appealing to potential purchasers and the capital markets. This target was found and it subsequently took several months to secure a deal, but the company acquired its target. Through the transaction, the company acquired the target's assets, including the rights to commercialise its products and intellectual property portfolio. However, the entrepreneurial managers and an investor director believed that there was a further acquisition target that was more closely aligned to the core business and would be a substantially better fit, which would solve the issue that triggered the sensemaking, namely missing a pivotal revenue target. This disagreement only became evident when the company missed its revenue target, as before this event, there was no

or little need for sensemaking on this issue. The entrepreneurial managers and an investor director took an opposing view to the rest of the board:

We had acquired a company, but nobody else on the board seemed interested in doing any further acquisitions other than the management and James, {an investor director} and it was a no go (CEO, Medco, first episode 2013).

The investor director, James, who voted to continue with the acquisition strategy, was unable to persuade the investor directors because collectively they held stronger economic capital and believed that the company needed no further acquisition activity to gain the required exit at a specified time point, which indicates that their priority was to their portfolio and not to the individual venture. A further acquisition would merely delay the timing of an exit and the investor directors believed sufficient organic growth, as proffered in the business plan, should attract a satisfactory selling price for the venture. Although initially there was informed and open debate on the subject at the board meetings, James was unable to persuade his fellow investor directors of the need for acquisition to fund the required growth. The investor directors gained enough overall board support to pass a resolution in favour of their position (i.e. no further acquisitions). This outcome indicates subgroups with stronger economic capital (the investor directors) can force decisions on subgroups with weaker economic capital. The investor directors, who possessed the voting power of the investor, which was always substantially more than the entrepreneurial managers, had a requirement to consider the portfolio return before the individual investment return, which often conflicted with the requirement of the entrepreneurial managers to maximise the individual investment return.

Second sensemaking episode at Pharmadev

In the second sensemaking episode at Pharmadev the investor directors, and part of the management team that had been parachuted in by the investor to address a missed

revenue target, contributed to the board's indecision over whether to pursue a sale that eventually collapsed, thirty-six months after the commencement of the adverse deviation, with no input from the scientists. The CSO noted during the first month of the episode: *"From a harmonious shareholder base, appeared a King Maker almost out of the blue"* (CSO, Pharmadev, second episode 2012). This was due to a change in the management of a principal venture capitalist investor. This venture house placed a new investor director on the board, *"the King Maker"* who thought he knew best and whose position was made clear through a directive issued during his first month in office: *"Comply with me or you will not receive any further investment"* (Inv Dir, Pharmadev, second episode 2013). During 2007-2008, the financial market became difficult and the financial collapse was beginning. The appetite for venture capital funding from financial institutions started to become more limited. The CSO expressed the feeling of the entrepreneurial managers: *"The agenda of the King Maker was to surround the company with his own people and what that actually achieved was to destroy the soul of the company which had been built up over the preceding years"* (CSO, Pharmadev, second episode 2012). He undermined the Chair by suggesting that he did not have the scientific background necessary to lead the company to success. Regardless of this posturing, the Chair wanted to move to a non-executive position for personal reasons and stood aside to make way for: *"A Chair to have a clear pitch to run at it"* (Ex-Chair, Pharmadev, second episode 2012). The King Maker also started to dictate to the CSO what sort of science he should be doing, which led to a combative environment. The CSO recalled:

We were riding on the crest of a wave, we had a lead on the opposition, our competitors worldwide, and everything was working out the way we had said. I did not believe in the sector specialists because their ideas were old ideas and we had to maintain ourselves (CSO, Pharmadev, second episode 2012).

This venture capital funder, through their investor director, pressured the board to accept their nominee. The King Maker insisted on the right to appoint directors. The new board members who had strong economic capital had been parachuted in by the investors, who had a portfolio of investments and hence the new board members and investor directors acted together to create a dictatorial environment, which supported the investors' agenda of maximising their portfolio return over the return of individual investments. The strength of their economic capital, aligned with their egocentric (and role centric) disposition amongst these investor directors formed a strong faultline and ensured that they got their position heard and supported by a board that became impotent to do otherwise. We see that subgroups with strong economic capital can force decisions on subgroups with weaker economic capital.

Second sensemaking episode at Drugtech

The second sensemaking episode at Drugtech commenced with a pronouncement by investor directors at a board meeting to stop all drug development. The investor directors stated that because they represented the investor and his voting and economic rights, they could force the decision to stop drug development and to sell the company against the desire of other investor groups including, in this case, the Chair. The CEO recalls:

The use of influence was beginning to be imposed, where individual directors expressed opinion from a sense of who they were representing, whether the representation was investors or themselves (CEO, Drugtech, second episode 2009).

Within the board, there developed alignments of groups who spoke frequently within group and, hence, by each board meeting there were well-rehearsed arguments that produced a progressively entrenched position:

I struggled to find any board consensus other than attempting to keep the item on the agenda as no decision other than further review of the

issue was plausible to the board (Chair, Drugtech, second episode 2010).

This outcome further supports the view that subgroups with stronger economic capital can force decisions, in this case the sale of the company, on subgroups with weaker economic capital. This subgroup has stronger economic capital and a role orientation as investor directors.

In all three cases, we observe a common theme expressing a relationship between capital and disposition. Subgroups with stronger economic capital and an egocentric disposition as investor directors force decisions on the entrepreneurial managers who possess less voting rights than the investor directors. The investors all had a portfolio of investments that were part of closed-end investment funds and needed to realise their investment by a certain time point, which took precedent to maximising the individual return of the underlying investments. Hence the entrepreneurial managers often held differing exit ambitions to the representatives supporting the investors. The investor directors possess the voting power on the entrepreneurial venture board as a proxy for the investors themselves, as the investor directors fully represent the investors in this regard and these voting rights were always greater than those of the entrepreneurial managers. The greater economic power, linked with the egocentric disposition, represents a latent faultline which has the potential to activate if, following a sensemaking trigger, encapsulated sensemaking is used by the actors in search of meaning. There may be circumstances where this relationship is weakened; a relationship was identified from the data involving allocentrism, which is discussed in the next section.

5.8 Allocentrism

I consider firstly the effect of cultural and social capital on the behaviour of actors and the relationship to allocentrism, as I observed from the data that allocentrism weakens faultlines and reduces the possibility of actors becoming engaged in encapsulated

sensemaking. In all cases, the cultural capital of the entrepreneurial managers, captured by their financial expertise, commercial expertise and/or technological expertise, is low-medium, whereas the cultural capital of the investor directors is medium-high. Differences in social capital are also observed from the data as the entrepreneurial managers' network tends to mature within industrial and academic circles: *"The managers improved their networks as they attended further conferences and commercial skills as they did more deals"* (CSO, Drugtech, first episode 2009) and the investor directors in investment and financial circles: *"The more deals the investor directors were involved with, they improved their deal structuring skills and syndicating opportunities"* (CEO, Drugtech, second episode 2009). The two homogeneous subgroups, entrepreneurial managers and investor directors share the same dispositions as those expressed in Table 5.5, with the exception where the management had been imposed on the venture by the investors (Pharmadev, second episode). The way the subgroups see the world, including their role in the venture and their ability to take someone else's perspective, is strongly related to an individual's capital. Allocentrism may disturb the above relationship and is more likely to be evident where broader cultural and social capital is possessed within a subgroup of actors. This is because networks are likely to be broader and more diverse when coupled with a more diverse education and background, facilitating the ability to look through the perspective of others.

There are three observed cases of allocentrism, two cases where actors from one subgroup observed through the lens of another subgroup (first sensemaking episode of Medco and Drugtech) and one case where the scientists wanted to work in the interest of the company, as testified by the CSO (first sensemaking episode of Pharmadev). In the latter instance, consultative debate between management and the scientists created an environment where observing through each other's perspectives facilitated better co-operation. The sensemaking episodes that illustrate allocentrism are as follows:

First sensemaking episode at Drugtech

The first sensemaking episode at Drugtech commenced with an unexpected toxicology result suggesting the systemic drug development administration was too risky. The CEO could see through the lenses of the investor directors. The CEO appreciated the needs of the investors, perhaps because he had been a venture capitalist himself and could put himself in the place of the investors. As expressed by the CSO:

We were fortunate enough to have the CEO with us on the visit, and we'd talked at length about what was going on and what might be happening and had a sort of an idea of where to go next (CSO, Drugtech, first episode 2009).

During the second week of the episode, the CEO compiled a board paper with other key personnel to table a resolution, detailing the change from systemic to topical administration with data that had been compiled from past research and development. At the end of the second week, the CEO sent a note to the investor representatives again detailing the outcome of the meeting with the scientists and explaining that a board paper was being written detailing the proposed changes. He emphasized that he would like to take the counsel of the investor directors, and that there was a degree of urgency to facilitate such a meeting and urged that such a meeting be set up. Before the next board meeting (five weeks from the start of the episode), the CEO met with the investor representatives, which assisted the negotiation of the strategic change. The investor representatives were sympathetic that the adverse deviation from the business plan was an uncontrollable event. The scientific outcome could not have been predicted and was a remote possibility that was both an unlikely and unexpected outcome. At this stage, the CEO and CSO realised that all parties at that meeting may be aligning in terms of a preferred solution. The change of administration for the drug from systemic to topical was debated and relief was expressed by the investor directors that at least there was a viable

alternative, and that the CEO and management team had pulled out the stops to present the case in a timely manner: *“He dealt with the investors”* (CSO, Drugtech, first episode 2009). The CEO presented the case via the language and understanding of a venture capitalist due to his ability to use the language and culture of an investor (as he was trained as a venture capitalist) and negotiated this position with both sides to gain a swift resolution. This broader (more diverse) cultural capital places actors in a better position to display allocentrism. The second observation of allocentrism is from the scientific group of management at Pharmadev.

First sensemaking episode at Pharmadev

The first sensemaking episode commenced when there was an announcement at a board meeting that the company had not met its breakeven point at an agreed time. The sensemaking episode unfolded and a new management team and board were recruited. By allowing the scientists (a part of the management team) to become a team with the shareholders, they became part of an open sensemaking process, consulting with the management:

Everybody wanted to get a result. We suddenly became a team with the shareholders, the executives, and to add to that the people working in the company, the scientists. The scientists felt that they were the last to know about anything, and the fact that they were on board for every decision that was made at this point really made it feel like we were all in one board. The scientific staff in the company always felt the deadlines were too short or too tight. The nice thing was we consulted them rather than imposed deadlines and they reacted very well to that (CSO, Pharmadev, first episode 2012).

In this case, the scientists had demonstrated commercial acumen earlier in the episode in particularly the CSO could tell a commercially exciting story:

He (the Chair) was wowed by the presentation (from the CSO) which on paper had appeared grim (Ex Chair referring to CSO, Pharmadev, first episode 2012).

The CSO had fulfilled commercial roles in industry, so stood in the shoes of commercially minded executives. This broader (more diverse) cultural capital once again places actors in a better position to display allocentrism.

The third observation of allocentrism is between the entrepreneurial managers and one of the investor directors at Medco.

First sensemaking episode at Medco

In the case of the first sensemaking episode at Medco, the individual actors saw the events through different lenses and can be portrayed in the following comparison. The first investor director, (an industrialist and now an investor director), sometimes took the same view as the CEO, but later in the venture aligned with all the other investor directors. However, the CEO was not aware of the other investor directors' collective viewpoint and pursued a business-building vision that was contrary to their desire to go all out to attract an exit after the acquisition. The Operations Director represented the views of the senior management team and aligned with the CEO, while a second investor director was typical of the pool of investor directors. The second investor director observed that the board had become polarised between the investor directors, who were working in tandem, and the entrepreneurial managers, with the investor directors failing to affect changes through a Chair who did not like public confrontation. This resulted in the board leaving it too late to change the direction of the company because the investor directors as a subgroup did not want to rock the boat, as they did not want adverse publicity from this investment to have a detrimental effect on the valuation of the portfolio. In this first episode, the first investor director acts in an allocentric manner. As well as his current position of investor director, he has acted as CEO of several companies and

could hence take either role to meet his needs and belief of events at a certain point in time:

The board consensus, driven by investor directors (other than James {the first investor director}, the investor director who had been a commercial manager) carried the vote and the acquisition was not voted through. It is interesting to observe James had a significant commercial track record of start-ups, whereas other investment directors had no such demonstrable record and this may have had a bearing on this board polarization and outvoting of an alternate acquisition (CEO, Medco, first episode 2013).

Although the board decision ultimately did not present in favour of the first investor director, at least the subject was initially discussed at the board in an open dialogue. If the investor director had not taken an allocentric view, it is probable the topic would have generated less interest at the board and been suppressed at an earlier stage in the debate. This would have been problematic as such important strategic initiatives are required to be debated and directed by the whole board: *“James was also able to reach out to commercial networks for advice. James was useful on the board as he contributed by reaching out to his commercial networks”* (CEO, Medco, first episode 2013). James could take a commercial role as he possessed diverse cultural capital (See Table 5.3). As well as being financially astute (Chartered Accountant), he also possessed commercial awareness and experience through acting as both an investor as well as CEO and CFO. This was further enhanced by diverse social capital (network in both commercial and investment circles) that enabled him to obtain both commercial advice but also meant he could be instrumental in sourcing contracts and acquisitions. Observations from the three episodes suggest, for allocentrism to be effective in reducing

the effects of economic capital and role orientation on sensemaking, an actor or actors need:

1. *To have capacity for allocentrism*

An actor or actors are likely to have capacity for allocentrism if they have more diverse cultural and/or social capital as seen in the three episodes above.

2. *To be allowed by other actors on the board to demonstrate their allocentrism*

In the first episode of Pharmadev, it was apparent that the scientists joined in board debates. Without such an invitation, they could not have demonstrated to the commercial team that they possessed valuable commercial knowledge which assisted in open sensemaking, as subgroups were comfortable to extract sense from each group.

3. *To have a need to use allocentrism*

Allocentrism may remain latent if actors do not require arguments to promote their positions. The three cases above all indicate that allocentrism is shaped by capital, demonstrated by individuals possessing social and/or cultural capital that is more diverse, allowing these individuals to see through the lenses of others. Having considered relationships between capital and disposition at both the individual actor level and team level, I now consider their role in faultline formation.

5.9 Board faultlines

5.9.1 Nature of faultlines

As detailed earlier in this Chapter, a faultline is considered strong if: The subgroups within the group are of similar size; there is a high level of homogeneity across other attributes within each subgroup; and there is a high level of heterogeneity between subgroups based on attributes, e.g. in one group there are females in their sixties and in the other there are males in their thirties. In the case of entrepreneurial venture boards, the subgroup of investor directors is likely to increase as the rounds of investment increase where individual investment houses require individual board representation. The number

of entrepreneurial managers is likely to stay relatively constant, hence creating subgroups of dissimilar size. The number of directors in each subgroup is based on the actual number of directors at the time of each episode as noted in Table 5.6:

First sensemaking episode		
Medco	Pharmadev	Drugtech
Chair (1)	Chair (1)	Chair (1)
Investor Directors (2)	Investor Directors (2)	Investor Directors (2)
Management (4)	Management (2)	Management (2)
		Independent Director (1)
Second sensemaking episode		
Medco	Pharmadev	Drugtech
Chair (1)	Chair (1)	Chair (1)
Investor Directors (4)	Investor Directors (6) (moving to 4)	Investor Directors (2)
Management (5) (moving to 3)	Management (2)	Management (2)
	Observers (2) (moving to 0)	Independent Director (1)

Table 5.6: Board composition during sensemaking episodes

The homogeneity of the groups is based on the degree to which capital is similar across the group and the degree to which disposition is similar across the group; the greater the similarity of capital (social, cultural and economic) across the group, the greater the homogeneity of the group. If allocentrism is enacted, then an actor or actors from one group can act as if they belong to another group, hence lowering the heterogeneity between groups. So interestingly, when high allocentrism prevails, this reduces faultline strength counter to most other cases, where allocentrism is absent. In considering the relationship between sensemaking and faultline strength, it is important to establish the relative strengths of the faultlines across all the episodes.

5.9.2 Relative faultline strength

Earlier in this Chapter, whilst discussing different forms of capital and dispositions, I observed within Drugtech, all the subgroups of management are egocentric (except the CEO in the first episode) and all the investor directors are egocentric. The social capital was homogenous within groups and heterogenous between groups, indicated by the observation that similar networks exist within groups. The economic capital was homogenous within groups as indicated by >50% ownership rights for the investor directors and <20% for the entrepreneurial managers. The cultural capital was also homogenous within groups as shown by the investor directors aligning themselves with investment and science, whereas the entrepreneurial managers aligned themselves with commercial business-building and science. Therefore, I expected the presence of a strong faultline in the board. In the second episode at Drugtech, the circumstances are the same as the first episode other than there is no observed enactment of allocentrism and hence the relative strength of the faultline is increased from strong to very strong.

Within Pharmadev, the subgroups are not as homogenous as those in Drugtech, with more subgroups receiving sense from other subgroups. There is a split in the management team between the scientists and the commercial team. The subgroups were more heterogenous within groups during the first episode, as all actors were relatively new to their roles, so the board in the first episode is associated with a weak faultline. It has been suggested above that as funding rounds progress in the evolution of an entrepreneurial venture, the actors in the entrepreneurial management subgroup and investor director subgroup accumulate greater cultural and social capital. Therefore, faultlines may strengthen on both sides of the divide, potentially leading to more entrenched positions. This is clearly seen in all the companies and is observed in all second sensemaking episodes, where stronger faultlines are observed in comparison to

the corresponding first sensemaking episodes. Therefore, I expected a faultline with a medium strength, since the teams have worked together longer.

Medco is very similar to Pharmadev, in terms of faultline strength. Although there is more evidence of allocentrism in Pharmadev, there is similar homogeneity between groups with differing numbers of directors in the faultline subgroups in both Pharmadev and Medco compared to Drugtech, which has the same number of directors in the faultline subgroups, strengthening the faultlines within Drugtech. Therefore, I have designated the same strength of faultlines at Medco and Pharmadev, initially with Medco moving to medium strength of faultline as sensemaking becomes encapsulated. A presentation of the faultline constituents is exhibited in Table 5.7:

	No in subgroup board composition (from Table 5.6) Episode		Homogeneity within the group Episode		Heterogeneity between groups Episode		Faultline strength Episode	
	1	2	1	2	1	2	1	2
MEDCO					Medium	Medium	Weak	Medium
Management	4	5 - 3	Low-medium	Medium				
Investor Directors	2	4	High	High				
Chair	1	1	N/A	N/A				
PHARMADEV					Low	Medium	Weak	Medium
Management	2	2	Low-medium	Medium				
Investor Directors	2	6 - 4	Medium	Medium				
Chair	1	1	N/A	N/A				
DRUGTECH					Medium	High	Strong	Very Strong
Management	2	2	High	High				
Investor Directors	2	2	High	High				
Chair/Independents	2	2	High	High				

Table 5.7: Assessment of relative faultline strength

The faultline strengths (right hand column) are allocated according to their relative strengths using the assessments in the first three columns as the basis for such a ranking.

5.9.3 Faultline strength and sensemaking

I now analyse the data with a view of understanding the relationship between faultline strength and sensemaking. An explanation of encapsulated and open sensemaking is presented in Chapter 4, where I elaborate encapsulated and open sensemaking. To consider the relationship between faultline strength and sensemaking, I need to first understand the relationship between faultline formation, faultline activation and the interpretation of the sensemaking trigger, which results in either a unitary or multiple accounts of the narrative (Maitlis, 2005).

5.9.4 Faultlines and the production of accounts

I reread my narratives to look for similarities, and in all cases, I fit the narratives into either a unitary account or multiple accounts as defined in the Glossary. I now consider whether there is an observed relationship between faultline formation and activation and sensemaking, resulting in unitary or enduring multiple accounts of the narrative (Maitlis, 2005). I group unitary accounts and then multiple accounts of the narrative for each sensemaking episode, I commence with the unitary accounts with a view to identifying precursors of faultline formation and activation to the unitary account formation. Both unitary accounts are the first sensemaking episode at Drugtech and the first sensemaking episode at Pharmadev.

5.9.5 Unitary accounts

The first episode at Drugtech presents with a unitary account where there was no requirement for the actors to present multiple accounts, since all actors accepted the account of the CEO as plausible. Maitlis (2005) in her definition allows for numerous views of the interpretation of the sensemaking trigger in a unitary account, and a unitary

account results if the numerous views can be integrated into a single account (refer to definition in the Glossary). The alternative involving terminating the business was neither necessary nor desirable. Although the board subgroups of Drugtech exhibit the strongest faultlines in comparison with the other cases, their faultlines were not activated because alternate accounts of the episode were proffered to restore order:

We needed some clear idea of what the next steps were. And I think the idea of switching to a topical drug was almost born in the meeting room and the conversation. And I think it bore fruit within days and weeks rather than months. It was a very, very quick decision. The board was held in good spirits, with constructive debate, and with continual mutual respect, which was critical in assisting the company move to its next stage of development. The management were clear of the significance of this decision (NED, Drugtech, first episode 2009).

The independent non-executive director recalled a swift re-orientation of the company: “Certainly there wasn’t any sense of crisis at the time” (Inv Dir, Drugtech, first episode 2009). This was echoed by the CSO, indicating that there was no hint of disagreement or resistance from the investor directors:

The flow of action was certainly very intelligible, intelligent as well (CSO, Drugtech, first episode 2009).

The relationship remained effectively unchanged with a swift consensus and no apportioned blame. A non-executive director affirmed the swift re-orientation of the company:

The CEO and CSO proposed quite quickly that we should re-focus our work on its use as an antimicrobial used topically (NED, Drugtech, first episode 2009).

During the fifth week of the episode, planning commenced to suspend systemic drug development, which was to be replaced with a topical programme. A further hurdle was the passage of the amendment through the UK regulatory agency, the MHRA (Medicine and Health Regulatory Authority), which was to take three months from this point. However, a phone call to the regulatory body confirmed that it was likely it would be passed (although the MHRA was unable to confirm unreservedly until it had fulfilled its review obligations):

By week eight, the board members were unanimously realigned, along with re-motivated staff, with a continual hope for the future of both the company and their personal careers (NED, Drugtech, first episode 2009).

In this episode, we observe open sensemaking throughout with the ultimate presentation of a unitary account. This is the case, even though there is a putative strong faultline, as it was not activated. Subgroups of actors will continue to receive sense from each other' subgroups if their position is not under attack. In this episode, there was no need to gain a dominant position, because as was reported by Maitlis, *"multiple stakeholders gave and guided numerous and varied views of multiple stakeholders into a new single collective account"* (Maitlis 2005 36). Initially there were numerous views of the next steps mentioned in the above narrative. The scientists came up with a putative suggestion that the CEO guided the rest of the board into a new single account – that being the switch from systemic drug development to topical development is beneficial and as such, a strategic change should be agreed to move to topical development of the drug candidate. As well as the first episode at Drugtech, the first episode at Pharmadev presents with a unitary account, but the precursor to the account is the formation of a weak active faultline, compared to a strong latent faultline as observed in the case of Drugtech above. The CSO of Pharmadev recalled the events:

And that was a completely different way to running an academic lab – and in fact the scientific staff who came from an academic background, many of them reacted very well to that discipline to achieve landmarks, milestones, call them what you will (CSO, Pharmadev, first episode 2012).

Open sensemaking weakened the faultline even though historically in this case, the scientists (entrepreneurial managers) had failed to trust the investor directors. The new team, including new investor directors, believed that they could achieve better commercial endpoints with the co-operation of and using a collaborative approach with the scientists. Their economic capital was less than investor directors in the sense that they were new to non-executive board appointments and less experienced compared to more seasoned investor directors, hence we observe only weak divergent role orientation between the investor directors and the entrepreneurial managers. This assists in promoting closer working relationship between the two subgroups on the board.

The above two episodes (the first sensemaking episode of Drugtech and the first sensemaking episode of Pharmadev) were also the shortest sensemaking episodes (two months and nine months respectively) with open sensemaking keeping faultlines latent or weak, presenting in unitary accounts. In contrast, in all encapsulated sensemaking episodes, activated faultlines were observed. I now consider the episodes, presenting in multiple accounts, with a view to identifying relationships that are precursors to the account formation.

5.9.6 Multiple accounts

The second sensemaking episode of Drugtech commenced when the board was divided on whether to proceed with further drug development. The sensemaking trigger was an unexpected board meeting pronouncement by investor directors to stop all drug development.

Before the presentation of multiple accounts, subgroups aligned swiftly against each other and by the second board meeting (eight weeks later) there were well-rehearsed arguments that produced progressively more entrenched positions. The Chair struggled to find any board consensus other than attempting to keep the item on the agenda as no decision other than further review of the issue was plausible to the board.

A clear link is evident in this case between their economic capital and their disposition (egocentric and role orientated) and a strengthening faultline. Encapsulated sensemaking led to the formation of this strong faultline. The directors were unable to reach consensus due to the desire of the entrepreneurial managers, as one subgroup, to continue drug development, and the investor directors wanting to secure an exit. Within six months from the episode start, there were multiple accounts of the episode. It is interesting to note that as Maitlis suggests, these numerous opposing views are narrow in that they are not developed by seeking the views of opposing subgroups and as each subgroup is relatively homogeneous in capital and disposition, this does not allow for wide and comprehensive debate. The Chair became somewhat impotent in controlling the board. The board meetings became progressively disordered until eventually board meetings were held away from the board table: *"I observed a board that really did not hang together and more conversations were held away from the boardroom"* (Chair, Drugtech, second episode 2009).

In the first sensemaking episode at Medco, open and free debate quickly moved to disjointed and confused debate:

I think it was difficult at times. My non-executive on the board (I was the Chair at this point) struggled to get a co-ordinated response. I think that he was quite sensible with his approach, but had a problem with some of the other [directors], and I guess that was due to conflicted interests.

It was complicated by the fact that it had so many shareholder representatives on the board (Inv Dir, Medco, first episode 2013).

This imbalance between investor directors, representing the investors and the entrepreneurial managers, affected the board debate regarding the consideration of fund performance ahead of company success, leading to conversations outside of the board. The investors all viewed the performance of their investment portfolios over the individual company success, which may have meant allowing the company to trade for longer with dilutive investment rounds to the current investors, something that they could not tolerate. The faultline was weakened because one of the investor directors, James, took the view of the entrepreneurial managers. However, the investor directors, as a group, held enough economic capital to oppose the view of the entrepreneurial managers leading to encapsulated sensemaking which swiftly strengthened the faultline from weak to medium strength, with the presentation of multiple accounts.

The second sensemaking episode at Pharmadev commenced with a missed revenue target, and the scientists were excluded from strategic board decisions. This led to a dysfunctional board. The new Chair held the view that the boards should not last longer than about an hour. To the CSO, an hour a month to bring a management team together was not at all effective, and it felt like they were going through a rubber-stamping exercise. Prior to the company's restructuring, the scientists had been brought back into the fold and care had been taken to listen to their advice, but again this was reversed and the entire section relating to the science was cut from the board paper. Also, the new CEO stopped any information passage from the company to the University, in case any trade secrets were leaked. The scientists were being asked to do experiments that they had already performed, that would merely give the same scientific results already recorded. This caused frustration with the scientist group, who constituted the

entrepreneurial manager group as other commercial managers had been parachuted in by the investor and hence aligned with the investor director subgroup:

At this stage, the board meetings became shorter and less structured with nothing really getting decided (CSO, Pharmadev, second episode 2012).

At the end of this process, the company did not achieve a sale, not helped by a dysfunctional board, and was put into administration.

The second sensemaking episode at Medco was triggered by a missed revenue target. This sales decline continued for forty-eight months, until the company eventually went into administration. The CEO observed that there was little by way of creativity, innovation or fresh ideas due to the investor directors believing their own story that the company had done enough to gain an attractive exit:

I think being independent or not is very important to how the directors saw the business. I do not think the business was their main priority. Some of the investor directors just sat there not paying lots of attention. They were just bums on seats (CEO, Medco, second episode 2013).

Encapsulated sensemaking (with the presentation of multiple accounts) ultimately led to the failure of the company. The accounts observed were narrow and shallow as the investor directors displayed an apathetic attitude and did not want to discuss anything that would suggest the company needed to change strategy.

I now present a summary of the patterns in Table 5.8 below:

Company	Episode	Sensemaking	Faultlines	Narrative
Medco	1	Open / encapsulated	Weak / medium	Multiple
Medco	2	Encapsulated	Medium	Multiple
Pharmadev	1	Open	Weak	Unitary
Pharmadev	2	Encapsulated	Medium	Multiple
Drugtech	1	Open	Strong*	Unitary
Drugtech	2	Encapsulated	Very Strong	Multiple

Table 5.8: Sensemaking, faultlines & narrative accounts

*The faultline in this case remained latent, whereas in all other cases, it became active.

Note: Even though the first episode at Medco commenced using open sensemaking, this turned into encapsulated sensemaking as the episode progressed

5.10 Discussion

In this Chapter, the relationship between type of sensemaking, faultline formation and the presentation of unitary or multiple accounts is considered. Venture capital backed boards are often faced with the necessity to make strategic decisions in the face of equivocality, representing an interesting research site in which to study the effect of sensemaking on faultlines. My research has sought to gain a deeper understanding of sensemaking in entrepreneurial venture boards and the potential impact of faultlines on sensemaking and the subsequent production of either unitary or multiple accounts.

In all the cases I studied, the investors and their representatives, the investor directors, were tasked with obtaining a portfolio return, and they all operate closed-end funds that require realisation of their underlying investments within a set time, hence the investor directors take a portfolio view of the investment. Such closed-end funds are commonplace in the venture capital industry. By contrast, the entrepreneurial managers

have an interest in my case studies only in the company that employs them. They take the view that they need to maximise the enterprise value of the company, irrespective of the timelines to exit imposed by the investors and investor directors. The Chair may align with either of the subgroups, dependant on whether they were appointed by investors, entrepreneurial managers or be independent. These homogeneous role orientations within the subgroup, and the heterogeneous role orientations between the subgroups, lead to the formation of faultlines.

As stated earlier in the Chapter, Bourdieu (1986, 1990) is not new to literature on entrepreneurship, but his theory of practice has not been extended to an understanding of faultline composition. I use Bourdieu's work to extend the faultline literature by considering Bourdieu's concepts of economic, cultural and social capital as well as to form a link to dispositions (Bourdieu & Wacquant 1992) to explain certain antecedents to faultline formation.

I initially consider the effect of economic capital on the behaviour of actors. My data suggest that subgroups with stronger economic capital (the investor directors) can force decisions on subgroups with weaker economic capital (entrepreneurial managers), but this is also due to their portfolio orientation, which enables them to use the power stemming from their economic capital. In all cases, actors with a portfolio orientated role seek a timed financial return and exit due to the closed-end nature of such funds, and possess stronger economic capital compared to their entrepreneurial manager counterparts. The investor directors possess stronger economic capital and hence they assume the control of the investors with the resultant voting power and shareholding. In three episodes, I clearly observe how subgroups possessing stronger economic capital are more likely to force decisions on subgroups possessing weaker economic capital, due to their position as investor directors.

The way individuals within subgroups see the world, including their role in the venture and their ability to take someone else's perspective, is strongly related to an individual's capital. Allocentrism has been shown to disturb the above relationship and is more likely to be evident where broader cultural and social capital is possessed by an individual within a subgroup of actors. This is because networks are likely to be broader and more diverse when coupled with a more diverse education and background, facilitating the ability to look through the perspective of others.

Increasing role orientation is likely to strengthen faultlines, whereas increasing allocentrism is likely to weaken faultlines. These dispositions are shaped by the capital endowments of the individuals in the subgroups. If the faultline is strong, once activated by the sensemaking trigger, then this is likely to result in numerous views of the sensemaking trigger event and increases the chances of encapsulation; further strengthening the faultline. These relationships can be tempered when there are group members who are allocentric, and who use this allocentrism to temper their role orientation, and try to understand and write the multiple accounts towards a unitary account. Open sensemaking is more likely when faultlines are weak or not activated.

Earlier in the Chapter, I note that in their review of the extant literature on faultlines, Thatcher & Patel suggest that the idea of sensemaking is largely absent from the faultline literature (Thatcher & Patel, 2012 993). I seek to address this gap. As sensemaking is contextual, and I have only considered two types of sensemaking, encapsulated and open, this is a limited study, nevertheless a contribution to the faultline and sensemaking literature.

There is a relationship in all cases between the type of sensemaking and relative faultline strength (refer to Table 5.11). When open sensemaking moves to more encapsulated sensemaking, faultlines strengthen with a greater potential for the presentation of multiple accounts. As Maitlis states: *"The new accounts generated through these processes*

tended to be cumulative and dense as leaders built upon, rather than tore down the accounts” (2005 36). The observations from this study support this proposition.

As shown in this study, a relationship exists between the activation and strength of faultlines and sensemaking. A new model is proposed (Figure 5.1) to link faultline formation and activation to encapsulated sensemaking with resultant multiple accounts. In this model, the economic, social and cultural capital of an individual within a subgroup (shaping the dispositions of role orientation and allocentrism) contribute to the faultline strength. The faultline is latent until activated by a sensemaking trigger. If numerous views of the interpretation of the sensemaking trigger cannot be resolved into a unitary account, this promotes encapsulated sensemaking which results in enduring multiple accounts, which in themselves strengthen faultlines.

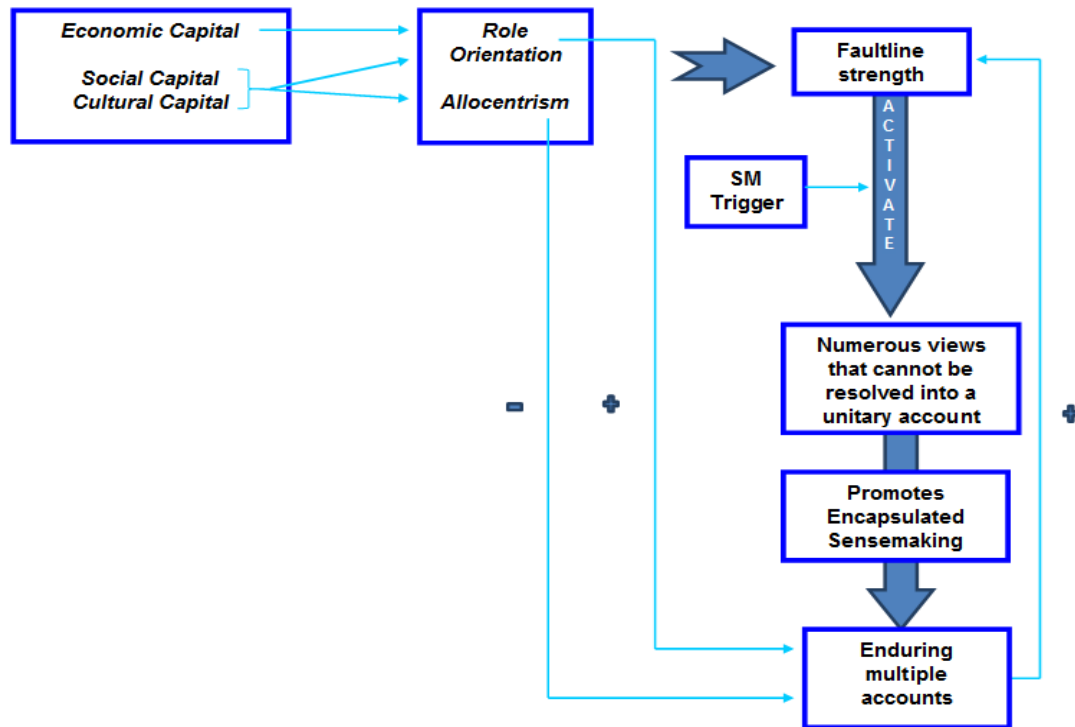


Figure 5.1: The relationship between faultlines and encapsulated sensemaking in entrepreneurial ventures

Note: All italic text contributes to faultline strength and unitary and multiple accounts were dealt with when considering sensemaking in Chapter 4

5.11 Conclusion

Lim *et al.* (2013), suggests that a faultline perspective offers an important alternative to the principal-agent perspective to understand new venture team dynamics. I add to this literature by providing insight into why these faultlines may emerge and with what consequences through a detailed study of the boards of venture capital backed entrepreneurial ventures. For new ventures, Lim *et al.* (2013) suggest “*the presence of weak faultlines that demarcate subgroups of founders and investors are likely to enhance the discovery of new opportunities*” (62). They propose that some factors strengthen faultlines; such as greater perceived imbalance of ownership equity between subgroups, the addition or replacement of new venture team members by investors without the involvement of founders, the existence of strong pre-existing ties between founders and

investors and factors relating to relationship conflict. Existing research indicates that there tends to be faultlines that run through new ventures, and that the membership of a group may significantly shape actors' sensemaking. I contribute to this with factors such as capital and disposition. I have suggested from this research that both capital, in the form of economic, cultural and social capital, and disposition (shaped by capital) are constituents of faultlines and hence should be evaluated when considering the overall board composition and individual board appointments.

Faultline strength has been historically viewed as strong if: The subgroups within the group are of a similar size; there is a high level of homogeneity across other attributes within each subgroup and thirdly there is a high level of heterogeneity between subgroups based on attributes (Lau & Murnighan, 1998). In assessing the homogeneity within each subgroup and heterogeneity between subgroups, capital and disposition have been considered as an alternate way of establishing the strength of faultlines, and contribute to the entrepreneurship literature on faultline formation by showing that the formation of faultlines is influenced by the individual capital and dispositions of the actors. This understanding of individual actors' capital and disposition may help future researchers provide better predictions of where active faultlines are likely to develop, and practitioners may predict board compositions that avoid the probability of strong faultlines and encapsulated sensemaking.

I extend the literature (particularly Chrobot-Mason *et al.*, 2009; and Jehn & Bezrukova, 2010) in demonstrating further negative repercussions of strong faultline formation, in the context of entrepreneurial ventures. The relationship suggested by this study between encapsulated sensemaking, promoted by strengthening faultlines leading to the presentation of multiple accounts, which then further contributes to the strength of the faultline, adds to such negative repercussions. Any positive effects, such as creativity and learning, from the strengthening of faultlines in entrepreneurial ventures, suggested

by the literature, may be diluted by the above negative effects. If a board struggles to make timely decisions or is unable to make decisions, no matter how creative or open to learning it becomes, the board will become ineffectual and impotent in its purpose.

CHAPTER 6: BOARD OUTCOMES FROM SENSEMAKING WITHIN ENTREPRENEURIAL VENTURES

"How did you go bankrupt?" Bill asked.

"Two ways," Mike said "Gradually and then suddenly."

[Ernest Hemingway. *The Sun Also Rises*, 1926](#)

6.1 Introduction

In this Chapter, I seek to gain a deeper understanding of decision-making in entrepreneurial venture boards. I consider the board processes of sensemaking within entrepreneurial ventures in Chapter 4, link these processes to faultlines in Chapter 5 and now follow through to decision-making outcomes. In this Chapter, I consider how encapsulated and open sensemaking processes influence boards, in reaching or failing to reach decisions, which may benefit practitioners in more efficient and effective decision-making. I also explore whether mediation by the Chair can be impactful in orchestrating sensemaking processes as well as the impact powerful actors can have on the process of sensemaking, leading to decision-making.

Encapsulated sensemaking, if left unchecked, is likely to end in venture failure. This is because progression through the constituent phases of encapsulated sensemaking potentially leading to sensehiding generates such mistrust that it may be difficult to return to open sensemaking. Indeed, there was no indication in my empirical data of such a return. This may be due to a lack of knowledge and education about the issues surrounding the two types of sensemaking, or a lack of leadership from the Chair in preventing encapsulated sensemaking. I suggest in Chapter 4 that encapsulated sensemaking leads to the introduction of often contradictory sensegiving material, which extends the time required to reach a board decision, or prohibits the reaching of a board decision. Can encapsulated sensemaking become open sensemaking or can encapsulated sensemaking be averted at all? If the Chair can prohibit the negative

progression from sensebreaking to sensefreezing, senseforcing and sensehiding, this intervention may decrease the probability of failure. In considering the role of the Chair in mediating the relationship between sensemaking and decision-making, I acknowledge that the concept of mediated sensemaking is not new. Strike & Rerup (2016) define mediated sensemaking as: *“The social position, orientation, and actions used by mediators to facilitate adaptive sensemaking that unfolds when someone begins to doubt the sense already made”* (880). The data from their study captures the mediation process through which “most trusted advisors” help family business entrepreneurs interrupt the momentum in sensemaking, by slowing down action and facilitating doubt. In this Chapter, the Chair may be viewed as a most trusted advisor by at least some of the board members, and indeed trust is an important element, that if lost may prohibit swift consensual decision-making.

One of the outcomes of entrepreneurial activity, which takes place under conditions of uncertainty, is that of failure (Ucbasaran *et al.*, 2013). The terminal failure of a venture does not happen out of the blue, rather the build-up to the failure is commonly characterized by a series of more minor failures, such as adverse deviations from the venture’s warranted business plan. Decision-making and the speed of decision-making are particularly important in dynamic, rapidly changing businesses, such as entrepreneurial environments (Forbes, 2005). If there is lack of or protracted decision-making leading to lengthy periods before a decision is made, the venture is more likely to exhaust its limited resources, especially its investment, and effectively fail. In Chapter 4, I saw patterns that suggested power game initiatives can be evident in encapsulated sensemaking and the mediation skills of the Chair to balance the debate between more powerful actors (the investor directors) and less powerful actors (the entrepreneurial managers) was also evident. In this Chapter, I dig deeper into these themes and explicitly code for mediation and power. In doing so, I supplement the relevant quotations from

Chapter 4 with further quotations around the mediation skills of the Chair and power. The research questions I seek to answer in this Chapter are: How does sensemaking affect decision-making and how does the Chair influence this relationship through mediation? And is there a relationship between the use of power and sensemaking that affects decision-making? A good environment to research such questions is the board meetings of entrepreneurial ventures, where decision-making is often seen following unexpected declines in business performance, which may be deemed an adverse event of sufficient severity to be of major concern to the investor. I initially consider the influence of sensemaking on decision-making within entrepreneurial venture boards, aiming to close this gap in the literature.

The Belgian Corporate Governance code guidance on board decision-making states:

No individual or group of directors should dominate the board's decision-making. No individual should have unfettered powers of decision-making; and good governance should provide a mechanism to ensure leadership, integrity and transparency to the decision-making process.

(Source: www.corporategovernancecommittee.be)

I showed in Chapter 4 that during open sensemaking, the directors were prepared to listen and consider the views of all other directors, irrespective of whether they belonged to an opposing subgroup; in contrast to encapsulated sensemaking where it is more likely a subgroup of directors will attempt to dominate the board meeting. Simon (1983) proffers that real life is not about making optimal decisions with perfect information, and using fully rational thinking, but about making sufficiently acceptable decisions, using subjective judgements given the constrained resource available to individuals as well as organisations. The challenge is to reach this position, i.e. "sufficiently acceptable decisions" even when subgroups constitute strong faultlines as suggested in Chapter 5, following an adverse deviation from plan, where a strategic board decision needs to be

made to realign goals and take a different path. Within the context of entrepreneurial ventures, action should stem from the decision to reinstate the interruption leading to the new objectives as suggested by Sandberg & Tsoukas: “*The specific sense generated is seen as a springboard for the actions actors take to reinstate an interrupted activity*” (Sandberg & Tsoukas, 2015 S15). The sense, in my case, following an adverse deviation from the business plan, does not need to be truthful or accurate but rather a plausible account that assists in the creation and adoption of a narrative that helps to restore order to an interrupted activity (Weick, 1995 55). However, it must be noted that some sensemaking scholars suggest accuracy should not be totally abandoned as “*some representations can be more helpful than others*” (Winch & Maytorena, 2009). There is an acknowledgement that such decisions from the sensemaking process may not result in restored activity, or can even lead to a catastrophic conclusion, as in the case of the Mann Gulch disaster, where many lives were lost in fire-fighting a natural disaster (Weick, 1993). The literature, however, has focussed on many more cases where order has been restored and only a few scholars have considered the outcomes of “nonsense” (the absence of agreed sense) with an absence of restored action. In my empirical study, there is a mixture of decision outcomes including failure of the venture, nonsense with no restored action, and sense with restored action. Such decision outcomes are not atypical in entrepreneurial ventures and hence make the empirical setting attractive and purposeful.

6.2 The role of the Chair on the board

Board level work requires that directors are engaged in sensemaking or direction setting, on behalf of the organisation as well as the multiplicity of stakeholders (Pratt, 1998, 2000). Through his/her leadership role, the Chair can make a significant contribution to board decision-making by knitting together information relating to acquisitions, sensemaking, sensebreaking, sensegiving and long term strategic decisions (Fleishman

et al., 1991). I consider the role of the Chair; firstly, in managing the decision-making process within boards in general, then secondly, I consider the role of the Chair specifically in entrepreneurial ventures through the mediation of board debate and in managing board contributions from powerful actors.

Board dynamics, constituting board composition and the interactions between board members, including the role of the Chair, have been a recent area of research activity (Nadler, Behan & Nadler 2006; Ehikioya, 2009;) with a strong emphasis on the positive and negative impact of the role of the Chair and CEO. In Europe, there is an acceptance that the role of the Chair and CEO should be split, which may control agency issues (Coombes & Wong, 2004). As my study uses a European research setting, all the boards I observe have both a Chair and CEO, and there is growing acknowledgement that this split role strengthens the monitoring, scrutiny and decision-making capacity of boards (Kakabadse & Kakabadse, 2008); in contrast to the dual role which may limit decision discretion (Ugeux, 2004).

In examining the role of the Chair, I consider the concept of board alignment (i.e. ensuring the directors work in the interest of the organisation and its shareholders), which involves both agency theory and stewardship theory (Sundaramurthy & Lewis, 2003). Agency theory favours control through externally-dominated boards relying on independence and drawing on various disciplines to achieve the correct balance of the board and the incentivisation of executives, whilst searching for a solution to reduce conflicts of interest among board directors (Jenson & Murphy, 1990). Stewardship theory favours collaboration between directors to gain consensual decision-making through goal alignment, which relies on the cohesiveness of the board (Sundaramurthy & Lewis, 2003). From the stewardship or agency perspective, the role of the Chair in nurturing a cohesive and balanced board becomes pivotal (Lorsch & Zelleke, 2005). Therefore, I observed the actions and language of the Chair when leading the board through

sensemaking processes, focusing on whether a cohesive and balanced board is achieved and what the consequences are to the decision-making outcomes.

Roberts *et al.* (2005) suggest that board effectiveness depends on the behavioural dynamics between the executive and non-executive directors, and the quality of those interactions depends on the mediation skills of the Chair (Roberts & Stiles, 1999). As already stated, I hope to add to this literature by further considering the mediation skills of the Chair in this study, as I saw the importance of such skills as a pattern in Chapter 4, and the need for mediation skills to balance the view of more powerful actors (the investor directors) with the less powerful actors (the entrepreneurial managers). This aligns with an emphasis in the extant literature on the Chair to include soft measures (culture, board composition *etc.*) as well as hard measures (finance, legal *etc.*) (Roe, 2003). Hollanders (2004) conducted a study in twelve European countries that identified that *circa* two-thirds of the expected skills of a Chair are on the soft side with leading and motivational skills at the top of the list. Several studies have been carried out confirming the influence of the Chair in shaping the board and aligning board interests (Pettigrew & McNulty, 1995; Levrau & van den Berghe, 2007). This includes the receipt of relevant material to board members and reducing the non-executive director's reliance on the executives to be informed. Kakabadse & Kakabadse (2008) conducted a study that reveals that good Chairs could nurture a better understanding of board dynamics by continual assessment of the board through monitoring and stewarding.

The role of the Chair includes collating information, facilitating information flow and developing an environment of free, frank and open debate. Board effectiveness has been shown to be positively related to interpersonal relationships between board members, where trust and openness are pivotal and the engendering of such an environment is somewhat dependant on the leadership skills of the Chair (Roberts & Stiles, 1999). There are several studies that embrace the idea that the Chair shapes the dynamics of the

board (Levrau & van den Berghe, 2007; Kakabadse & Kakabadse, 2008). Some studies have focused on information flow and the Chair's ability to ensure all relevant information is made available for timely decision-making (Hackman & Wageman, 2005), whilst others have concentrated on acting as a counter-weight between the various board members (Alexander *et al.*, 1993).

Gabrielsson *et al.* (2002) proffer that the venture capitalist and the entrepreneur/owner-manager of the portfolio firm may have diverging expectations to board roles. In this setting, the board becomes an interesting meeting place for studying the dynamics between external and internal stakeholders and the role of the Chair. Hence my research setting of the boards of entrepreneurial ventures is an appropriate setting to consider the role of the Chair. Also, the boards of venture capital backed entrepreneurial ventures normally consist of entrepreneurial managers as executive directors and investor directors as non-executive directors, as they frequently sit on numerous boards within the investment portfolio. Although this is common practice in Europe; in the US, boards tend to include a small number or even just one executive director. Hence, the research setting of using European biotechnology entrepreneurial venture boards is more appropriate in observing subgroups of executive and non-executive directors. The UK self-regulating combined code of Corporate Governance supports the principle which suggests the Chair should facilitate the effective contribution of non-executive directors and ensure constructive relations between executives and non-executive directors.

In summary, the Chair must take the prime leadership position in attempting to obtain consensus in committing the company's resource to a set course to meet their overall objectives. Therefore, a board can only become effective if it is organised as a collective decision-making body, and the Chair has a pivotal role in achieving this aim. I now consider this vital relationship between the role of the Chair in board decision-making.

6.2.1 The role of the Chair in board decision-making

The principal work of the board revolves around complex decision-making (Leblanc, 2009). Useem & Neng (2009) define decision-making as: *“A fundamental board duty as those moments when governing boards face a discrete and realistic opportunity to commit company resources to one course or another. Decisions in the case of a board are made by a group of peers acting as a college”*.

In his review of Corporate Governance in UK banks and other financial industry ethics, Walker (2009) states: *“The Chair should facilitate, encourage and expect the informed and critical contribution of the directors, in particular in discussion and decision-making on matters of risk and strategy”* (Recommendation 9). Capable Chairs lead by example, empowering and involving direction in decision-making (Bloch, 2005).

Surowiecki (2004) takes the position that to be able to act, decision-making is needed and that there is potentially a problem with decision-making in small groups where there is no method of aggregating the members' opinions: *“Under the right circumstances, groups are remarkably intelligent and often smarter than the smartest people in them”* (2004: xiii). A stronger Chair may be able to achieve such aggregation of opinions if there is awareness of the need to conduct board meetings to achieve this aim and to mediate board debate and decision-making. The Belgian Corporate Governance Code highlights the role of the Chair of listed companies as follows:

The Chair should take the necessary measures to develop a climate of trust within the board, contributing to open discussion, constructive dissent and support for the board's decisions (Belgium Corporate Governance Code, 2009).

An area where recent research has been focussed on is gender diversity, and such diversity on boards may also impact both the process and quality of decision-making (Hoogendoorn *et al.*, 2013); and may cause conflict as a consensus may be more difficult

to achieve (Terjesen *et al.*, 2009). The Chair has a duty to ensure the composition of the board is appropriate for purpose, as noted earlier, and an important area this impacts is gender diversity and decision-making. Gender diversity on boards guards against groupthink (Robinson & Dechant, 1997; Daily *et al.*, 2003). This research found that when a board does not include gender diversity, the directors are likely to be similar, coming from similar backgrounds, with a similar education and having similar networks. Maznewski (1994) has found that such homogeneity among directors is more likely to lead to groupthink; whereas Zelechowski & Bilimonia (2004) takes an opposite view, citing women ask more questions and decisions are less likely to be made without a discussion, hence reducing groupthink. No empirical studies have considered sensemaking, decision-making and the role of the Chair, and I seek to address this gap in the literature.

6.2.2 The role of the Chair in managing powerful actors

McNulty *et al.* (2011) argue that the Chair can tap into four sources of power when fulfilling their leadership role:

1. *Structural power* is the power inherent in the formal organisational structure and hierarchy
2. *Ownership power* is the power deriving from either owning a significant shareholding in the firm, or power gained from forging long-term relationships with significant owners or founders
3. *Expert power* is the power that emanates from demonstrating an ability to handle the firm's key tasks and contribute to organisational performance
4. *Prestige power* is the power related to personal prestige or status.

These forms of power are influenced by the capital and disposition of individual directors (seen in Chapter 5). Structural power can be used where the Chair may speak to the leadership team of an organisation, all of whom may not be on the board, to glean

information and understanding prior to board debate. Expert power can be accessed by the Chair if an expert opinion is required either to affirm a board decision or to contribute to the board debate, prior to decision-making. Prestige power can be used by the Chair if say he/she is an industrial expert, with an influential industrial network to establish contact with potential customers. Ownership power (in terms of my study, economic power) is particularly observed during phases of encapsulated sensemaking as discussed in Chapter 4, which the Chair may influence through mediation and demonstrates the link between the role of the Chair and power. Kakabadse & Kakabadse (2008) suggests that one of the Chair's attributes needed for effective performance is an understanding of sensemaking, and as I show a relationship between power and encapsulated sensemaking in this Chapter, the consideration of power is relevant to understanding sensemaking. I now review the relevant literature between sensemaking and power.

6.3 Sensemaking and the influence of power

Having examined the various components of sensemaking in Chapter 4, I now consider the influence of power on these sensemaking components in the context of the boards of entrepreneurial ventures. This is in response to the identification of new phases of encapsulated sensemaking that were seen in Chapter 4. In this Chapter, I further investigate power to understand the contribution made by powerful actors within the sensemaking process and in turn the influence on decision-making. The issue of power and politics remains largely detached from our understanding of sensemaking. This detached relationship is considered by Maitlis & Sonenshein (2010), who state that Weick's (1995) updated work on sensemaking suggests that there is a key role for power and politics in sensemaking, where Weick recognizes the structural constraints on action and cognition (Magala, 1997). Despite Weick repeating his call for increased attention to be given to power and politics in his updated theory of sensemaking, his hopes are still

largely unfulfilled; a gap I seek to address. This call for further research in this area was echoed by Drori & Ellis (2011), when they considered power game initiatives and sensegiving initiatives through an in-depth case study. They state (15): *“The generalization of sensegiving through power games for the purpose of avoiding change warrants further studies. A key issue for future research would be to look at other contexts and conditions, such as organisations in different industries and in different stages of their life cycles”*. They also call for further research that may look at power game initiatives as informal mechanisms used to erode structures of control by bypassing or ignoring managerial decisions or curtailing and neutralizing managerial action. Further research may take the task of studying how sensegiving through power game initiatives eventually contributes to ambiguity in situations of change. This is of relevance to my study where I look at sensegiving through power game initiatives in entrepreneurial venture boards where a change of direction is required.

There are several ways of conceptualising power. Parsons (1957, 1963a, 1963b, 1967) seeks to treat power as: *“A specific mechanism operating to bring about changes in the action of other units, individual or collective, in the process of social interaction”* (Parsons, 1967 299). Parson’s conceptualisation of power links to consensus and the pursuit of collective goals. A second definition is given by Adrendt (1970 44) and relates to the human ability not just to act alone but in concert, whilst the power play occurs. A third conceptualisation is the three-dimensional view of power presented by Lukes (1974), and one which I adopt. Although this now seems dated, having been written some forty years ago; his 1986 book which outlines his conceptualisation has been cited 11,700 times as noted by Google Scholar as of February 26th, 2017, and is still considered relevant, and a second edition of Lukes’ book was published in 2005. This new edition includes a critique of the three dimensions of power, concluding that although there is due criticism against all three dimensions, they are still relevant (Lukes, 2005 58 & 59). I have

considered all the conceptualisations outlined above, and conclude that Lukes' conceptualisation most closely aligns with my empirical observations in Chapter 4; and I describe this alignment as I progress through a description of Lukes' conceptualisation of power below. Therefore, I use the literature which subscribes to Lukes' conceptualisation of power as core along with the arguments presented therein and consider the various views of the expressed three dimensional views of power. Lukes presents a conceptual analysis that considers what he terms the first, second and third dimensional views of power.

The first dimensional view is that typified by Dahl and his fellow pluralists (Dahl 1957; 1958; 1961); the first where groups of individuals try to maximise their interests, with moving lines of conflict. Dahl's definition of power is: "*A successful attempt by A to get B to do something he would not otherwise do*" (Roderick *et al.*, 1969 82). This definition assumes power cannot be taken for granted and should be observed empirically. Polsby (1963 121) notes that the researcher "*should study actual behaviour, either at first hand or reconstructing behaviour from documents, informants, newspapers and other appropriate sources*". This focus on observable behaviour involves studying decision-making that results in a decision, often after observing conflicting interests. This one-dimensional view may fit well with early sensegiving initiatives within encapsulated sensemaking episodes, where the attempts are openly discussed around the board table, with an initial intent to try and reach a consensual decision, moving to sense gleaned only from the subgroup offering their version of the problem and solution.

The second dimensional view put forward by Bachrach & Baratz (1970) embraces coercion, influence, authority and force. This is important in the context of entrepreneurial ventures as I observe all four of these elements in the empirical data. These elements are defined as follows: "*Coercion exists where A secures B's compliance by the threat of deprivation where there is a conflict over values or course of action between A and B*"

(Bachrach & Baratz, 1970 24). In the context of entrepreneurial ventures, coercion, through the threat of deprivation, may be the threat of withholding consent required by an investor director (to protect the investor's interests), to allow the entrepreneurial managers to execute a course of action. However, such consent is needed for the entrepreneurial managers to progress the business: *"Influence exists where A, without resorting to either a tacit or an overt threat of severe deprivation, causes B to change his action"* (Bachrach & Baratz, 1970 30). In the context of entrepreneurial ventures, influence may occur from the mere knowledge that the investor directors possess greater economic power (as discussed in Chapters 4 & 5): *"In a situation involving authority, B complies because he recognises that A's command is reasonable in terms of his own values, either because its content is legitimate and reasonable procedure"* (Bachrach & Baratz, 1970 34, 37). In the context of entrepreneurial ventures, authority may exist as the entrepreneurial managers recognise that the investor directors possess more professional knowledge, say in relation to deal structuring, so they will accept authority around this subject as it aligns with their acceptance of the superior knowledge of investor directors; or conversely the investor directors recognise that the entrepreneurial managers may have superior knowledge of the business, so they concede authority to the entrepreneurial managers in this area. In the case of force: *"A achieves his objectives in the face of B's non-compliance by stripping him of the choice between compliance and non-compliance"* (Bachrach & Baratz, 1970 28). In the context of entrepreneurial ventures, choice is removed through senseforcing, a concept introduced in Chapter 4, where the investors typically force/impose a decision on the management. Hence two-dimensional power involves both decision-making and the absence of decision-making: *"A decision is a choice among alternate modes of action"* (Bachrach & Baratz, 1970 39); a non-decision is *"a decision that results in suppression or thwarting of a latent or manifest challenge to the values or interest of the decision maker"* (Bachrach & Baratz,

1970 44); such a thwarting may be seen during sensefreezing, where an idea stemming from the entrepreneurial manager subgroup is disregarded by the investor director subgroup on the basis that the investors would never agree to the idea. This two-dimensional view of power may fit very well with the empirical data, which considers sensemaking processes leading to both decision-making and the absence of decision-making, which I observe in my data. In Chapter 4, the phases of encapsulated sensemaking can lead to the absence of decision-making as they progress beyond sensebreaking. An understanding of any link to the views on power may help to further understand the reason power has such an impact on encapsulated sensemaking.

The third dimensional view broadens out to allow for potential issues that can be kept out of decision-making, such as decisions never reaching a decision-making stage because they are averted or because potential conflict has never been actualised. Schwartz (2005) further considers this third dimension of power and includes several types of “*power over people*”, including both positive and negative influences (1010), as well as issues that can be neglected in decision-making because they tend to be associated with situations that never reach a point of decision-making or are never fully acknowledged. This would be the case in latent conflict, which consists of a contradiction between the interests of those exercising power and the real interest of those they exclude, such as the case where there are latent faultlines as evidenced in Chapter 5. A broad definition of power should include all three views and allow for the broadest interpretation of data to minimize the risk of missing pertinent observations and issues. Therefore, the definition of power used in the current study can be summarised as follows:

Power is one individual or group getting another individual or group to do something that he or they would not otherwise do (Dahl 1957 203).

This definition is inclusive of both decision-making and the absence of decision-making processes and may involve the aversion of potential conflict which aligns with the observations seen within the phases of encapsulated sensemaking in Chapter 4.

Although there is research on power game initiatives and sensegiving by managers (Maitlis & Lawrence, 2007), which acknowledges that persuasion and meaning creation are key parts of strategic management, little research has been carried out to consider confrontational sensegiving (Drori & Ellis, 2011), and no attempt has been made to link the dimensions of power to sensegiving initiatives in confrontational situations. In presenting the following Table 6.1, I suggest a relationship between power and the encapsulated sensemaking constituents (from Chapter 4) and decision-making; and suggest the order of employing power game initiatives is likely to follow the first, second and third dimension of power as conceptualised by Lukes, aligning with the temporality of sensemaking components. I do this because from Lukes' description of his conceptualisation, these seem to align, as described above, to the phases of encapsulated sensemaking as observed in Chapter 4. I then code against these (refer to section 6.4.3) to establish whether the empirical data supports the theoretical construct.

Sensemaking components	Dimension of power	Decision-making potential
Sensebreaking	1	Decision-making
Senseforcing and sensefreezing	1 & 2	Decision-making and no decision making, including coercion, influence, authority and force
Sensehiding	1, 2 & 3	The dimension that can avert potential decisions reaching the decision-making stage

Table 6.1: Encapsulated sensemaking, power and decision-making

I have introduced above the possibility that sensemaking could influence decision-making and that the mediation skills of the Chair, including the control of power game initiatives by the Chair, may impact decision-making through influencing the sensemaking process. I now seek to examine these relationships through analysing empirical data from my study.

6.4 Data and methods

6.4.1 Research setting

Board decisions are critical to the success and failure of a company. To understand the decision-making processes of entrepreneurial venture boards, I set out to understand the relationship between the board's sensemaking processes and the resultant outcomes by way of decision or indecision:

There are many situations requiring individuals to engage in sensemaking, and we suggest that none is more important than when an entrepreneur experiences business failure (Ucbasaran et al. 2013 196).

Whereas the above refers to sensemaking after the failure event, here I consider sensemaking before the final failure occurs and after adverse deviations from the business plan, attempting to throw light on whether such negative outcomes can be avoided. Any influences on the outcome of the process that lower the chance of failure, including mediation of contested debate and the control of power game initiatives amongst board directors by the Chair, may usefully inform the sensemaking literature, and may assist the practitioner in understanding board dynamics. In this Chapter, I seek to explore how it is that in some ventures the more minor failures are addressed, whereas in others the minor failures accumulate into the terminal failure of the business. I do this by presenting my empirical evidence about all six episodes, then I analyse them via synthesis. How actors sensemake about minor failures and then make decisions is

clearly an important component of this story which I consider from the empirical data, but inductive observations from the data show that the Chair may have a significant role in directing the board towards decision-making by being influential on the sensemaking process.

6.4.2 Sensemaking episodes and case backgrounds

In total, six episodes were selected where these three companies substantially (as recognised by a majority percentage of the board members) adversely deviated from the warranted business plan.

As already stated in Chapter 3, the decisions that followed each sensemaking episode were varied; two episodes were followed by consensual board decisions (i.e. all board members agreed), two episodes were followed by forced board decisions whereby some board members disagreed or agreed reluctantly to support the board decision, and two were preceded by protracted indecision, resulting in board paralysis and eventual company failure. A summary of each sensemaking episode, its trigger, its length and the final board decision is presented, along with case study narratives are presented in Table 3.2 and Chapter 3 under Methods. I observed power game initiatives in encapsulated sensemaking in Chapter 4 (as represented in Table 6.2 below) and will now consider power as an influence over this sensemaking process in more detail. I use the data in this section to consider whether there is a theme between the dimensions of power, the types of sensemaking, and the outcomes in the form of decisions or indecision.

	Drugtech Episode 2	Pharmadev Episode 2	Medco Episode 1	Medco Episode 2
Sensebreaking	Boards 1 & 2	Boards 1 & 2	Boards 1 & 2	Boards 1 & 2
Sensefreezing	Boards 3 & 4	Board 3	Boards 3 & 4	Boards 3 & 4
Senseforcing	Boards 5 & 6	Board 4	Board 5	Board 5
Sensehiding	Boards >6	Board 5	Board 6	Board 6

(Taken from Chapter 4, Table 4.3)

Note: Boards relate to board meetings

Table 6.2: The timing of components of encapsulated sensemaking

I use my empirical data to illustrate the relationship between the three dimensions of power as assembled in Lukes (1974) and components of the sensemaking process, not all defined in the extant literature (refer to definitions in Chapter 1 and Glossary).

6.4.3 Data coding

Tables 6.3 and 6.4 display the data coding and structure used in analysing the data for this Chapter. The coding for encapsulated and open sensemaking and information flow linked to power game initiatives is displayed in Chapters 4 and 5. I do not repeat the sensemaking coding, however I do enhance and refine the coding of power, using both quotations from Chapter 4 and quotations not used in Chapter 4. The data is subsequently used in this Chapter to consider relationships between sensemaking and decision-making, the influence of the Chair as both a mediator within the sensemaking process of the board debate and control of power game initiatives. Table 6.3 involves the coding for the decision-making outcome and the mediation skills of the Chair. Table 6.4 shows the data coding to move from power quotations to various phases of sensemaking and the link of these to the power literature as described above. I then use this data to illustrate an important link between decision-making, the mediation skills of the Chair, the type of sensemaking and the use of power games.

First Order Data	Second Order Data	Aggregate Theoretical Dimensions
Evidence of protracted discussion in the board room Avoidance of discussion in and outside the board room	Indecision / no decision	Decision-making outcomes
Statements from various actors that they felt coerced into a particular decision Evidence that investors invoked their ownership rights as a means of pursuing a course of action that was not unanimously agreed	Forced decision-making	
Evidence of open discussion taking place in the board room soon after the adverse deviation Statements from actors that they wanted to work together to resolve the issue Statements from actors that they felt the decision-making process was fair open and contributed to by all that wished to contribute	Consensual decision-making	
Statements about the way the Chair is perceived Statements about the direction of the company as observed by others Statements relating to observations by the Chair that impacts on the company	Observations of the Chair on the direction of the board	Effect of mediation strength of the Chair
Statements about the way the Chair acts Statements about the direction of the company due to the action of the Chair	Chair activity that affects the direction of the board	

Table 6.3: Data coding for decision-making outcomes and mediation strength of the Chair

First order data	Second order data	Aggregate theoretical dimensions
Use of power by both subgroups to discredit alternate positions	Lukes first dimension of power	Power
Use of power predominantly by the more powerful investor director group to paralyse	Lukes first and second dimensions of power	
Use of power solely by the more powerful investor directors to force their agenda and point of view	Lukes first and second dimensions of power	
Hiding of facts or pertinent data knowingly and with an intent to manipulate	Lukes first, second and third dimensions of power	

Table 6.4: Data coding for power linking to Lukes' conceptualisation

6.4.4 Research participants

The study uses the same research participants for all the empirical work, so the narrative on research participants in this section is repeated in all the relevant empirical Chapters for clarification.

The views and experiences of the board members of these three companies were recorded over thirteen years. There were several stakeholder groups: Entrepreneurial managers, investor directors, investors and Chairs that made the environment suitable for sensemaking behaviour, especially given that the subgroups could attempt to gain influence in numbers (Allmendinger & Hackman, 1996). The board members represented several stakeholders, providing the environment to observe the responses of and interactions among individual board members and director groups when presented with adverse deviations from warranted business plans. The board members were observed throughout the lives of the companies and were interviewed during periods of adverse deviations from a business plan that had been agreed by at least one subgroup. They were also interviewed subsequently, either when regrouping to enable a board decision to be made as a unified course of action or when failing to make a board decision, often ending in terminal failure.

6.4.5 Study design

The study of processes such as sensemaking involves observing and interpreting individuals' and groups of homogeneous actors' accounts (their understanding of an unfolding story). As is consistent with the rest of this empirical study, this work calls for a qualitative method (Isabella, 1990; Gioia & Thomas, 1996) with the potential to compare situations across similar case studies of comparable organisations. The present study meets these criteria where both retrospective and real-time sensemaking dynamics are followed (Gover & Duxbury, 2012). Semi-structured interviews were used in this study to

collect and analyse the data. The methodology is the same as that used in Chapters 4 and 5 (sections 4.3 & 5.4).

6.5 Findings and analysis

6.5.1 Decision-making outcomes

As I am interested in decision-making in this Chapter, I consider the sensemaking episodes and start with the decision-making outcome; then explain what happens in each case drawing out mediation displayed by the Chair and power game initiatives and the connection between the use of power and the role of the Chair, and connect this to the type of sensemaking observed during such episodes, as described in Chapter 4. Table 3.2 sets out the episodes and details the strategic board decisions; two decisions were consensual, two forced and two were periods of indecision. I consider these decisions in that order and then compare them.

As this Chapter concentrates on the Chair as a mediator in reaching a decision and as a putative controller of power game initiatives, I set out their background, how they were appointed and their prior experience, which all may have a bearing on their subsequent behaviour and ability.

Drugtech

The Chair was appointed by the entrepreneurial managers and remained in post throughout the life of the company. He did not possess the level of economic capital of the investor directors and less than 1% share options. He held no other investments. His background was in both clinical science and management, but not in entrepreneurial ventures. He possessed a substantial network, but only within large pharmaceutical circles (refer to Table 5.4).

Pharmadev

Pharmadev appointed three Chairs during the life of the company. The first Chair was removed during the first sensemaking episode (along with the CEO), which was a

consensual and an uncontested decision by the shareholders and replaced by the second Chair, whom was the interviewee. The second Chair, appointed by the University who held a significant shareholding at the time, was replaced prior to the second sensemaking episode, as the investors called for relevant industrial experience and the second Chair was from the telecommunications industry and not the life science industry. At the time of the interviews, this Chair was no longer in place, hence defined as the ex-Chair, as a third Chair had replaced him who led the board during the second sensemaking episode and to the company termination. The second Chair (my interviewee) did not possess the level of economic capital of the investor directors and less than 1% share options, but he had more influence than the entrepreneurial managers. He had retired from a multi-national corporation, but had no experience of the entrepreneurial ventures other than other non-executive director appointments (refer to Table 5.2)

Medco

Medco appointed two Chairs throughout the life of the company. The first Chair was appointed by the investor and in place throughout the first sensemaking episode. He departed at the end of the second sensemaking episode, been replaced by a Chair that took the company to receivership. He did not possess the level of economic capital of the investor directors and held less than 10% share options, but significantly more influence than the entrepreneurial managers. He commenced life in the public sector, and swiftly moved to commercial roles in the private sector and management of a corporate equity portfolio. He had not held prior Chair appointments in entrepreneurial ventures. He possessed a substantial network but only within medical device circles (refer to Table 5.3).

6.5.2 Consensual decisions

Drugtech (first episode)

The first sensemaking episode resulted in a consensual swift decision, with the investor directors accepting an alternate strategy put forward by the entrepreneurial managers and probably wanting ammunition to argue with their boss, the investor, who was both an individual private business angel and the sole investor. They were surprised at a toxicological result, from the drug development process, which meant the systemic drug development had to be curtailed, and pleased that the executives had taken the initiative to find a suitable alternative plan, which led to consensus, and maintaining respect: *“He {the CEO} spoke directly with the investors”* (CSO, Drugtech, first episode 2009).

The investor directors received the sense as they engaged and accepted the alternate option as a viable alternate strategy. The swiftness and consensual nature of the decision led from early sensegiving by the CEO to sensereceiving by the rest of the board and the acceptance of the alternate option as a plausible new strategic direction:

The CEO and CSO suggested that the abandonment of the drug as a systemic and moved to a topical (CSO, Drugtech, first episode 2009).

This led to the re-orientation of the company, with the adoption of a fresh vision, a new mission, new goals and objectives: *“I think {the adverse deviation as a trigger} came out of left field and the company did re-orientate itself in a quite dramatic way”* (NED, Drugtech, first episode 2009).

A swift consensual decision resulted from open sensemaking. I now consider the role of the Chair on this process. In the first episode of Drugtech, the functionality of the board did rest on the mediation skills of the Chair keeping an environment open and where all views from all directors are brought in to the open for fair and balanced consideration, and in doing so, assisted the information flow to move freely between all directors. I have hence defined the mediation strength of the Chair as strong, due to his ability to keep the sensemaking open. I observed a functional board where sense was being drawn from any actor that was willing and able to contribute to the debate:

The Chair oversaw a functional board with good interaction between the directors that were healthy, constructive or value added (CEO, Drugtech, first episode 2009).

The Chair's main challenge was to encourage the right balance of advice and opinion from each director, but he certainly was acting in a 'no blame' environment:

Such a board environment led to a harmonious board with no fear of expressing opinions or of adding to a debate in a constructive manner (CEO, Drugtech, first episode 2009).

This led to a board that functioned appropriately in its decision-making capacity:

The Board appeared to act in unison with no blame or little contention observed (CEO, Drugtech, first episode 2009).

The mediation skills were strong in this episode, where the Chair ensured the board meetings involved free and frank debate. The Chair's role was facilitating information flow in an open, high trust environment:

Board conversations were regular, open and often spontaneous, allowing for creative and innovative problem-solving (Chair, Drugtech, first episode 2009).

It may not be trivial for the Chair to maintain an open sensemaking process, but with less evidence of power game initiatives, it is likely that the Chair will be orchestrating an open and uncontested debate. There is some suggestion of power game initiatives where the entrepreneurial managers demonstrated to the investor directors their knowledge of the business and networks that assisted in defining the new strategy and change of direction:

I do not think there was anything in this instance where anybody needed to use power dynamics (BD director, Drugtech, first episode 2009).

As this solution was immediately accepted by the investor directors, they had no need to use power to force their agenda as it was the same as the entrepreneurial managers:

The whole energy of the board was turned on the problem. There was none of the attitude of who can I hit to avoid being hit myself (NED, Drugtech, first episode 2009).

It can be argued that sensemaking was swift (two months, refer to Table 3.2), minimal sensegiving was aimed at the actors with the strongest economical capital first and sensebreaking activities were either suppressed, so accommodating (observed at the start of sensebreaking) or not evoked, with no blame tactics and an ongoing lengthy search for plausible options to close the gulf. It is possible that through this change management process, the social need to make sense commences immediately and depending on the deemed severity and urgency, sensegiving by one set of actors can close the gulf in the delivery of new goals and setting of new objectives.

Pharmadev (first episode)

The first Pharmadev sensemaking episode was triggered by the company not meeting its breakeven point at an agreed time-point in the business plan. The trading position further declined and the company ran out of cash reserves and was forced, after a period of nine months, to return to shareholders with a request to recapitalise the company. This request was granted by the board (with total agreement) but not without removing the Chair and the CEO, prior to this request. The first sensemaking episode was discussed openly at board meetings and the decision led to immediate action. It was obvious to all the board directors that a new management team, a new business model and the engagement of the scientists were all required. This was also obvious to all the major shareholders at the time, and such a crisis led to an open sensemaking environment with one resultant unitary account, leading to a consensual decision:

The University had one of its most promising ideas on the risk of early failure. Everyone concerned pulled together to find a solution (Ex Chair, Pharmadev, first episode 2012).

At the time of interview, the ex-Chair interviewed was the new Chair, replacing the Chair mentioned below. Over the life of this company, three Chairs existed, the first was dismissed during this first sensemaking episode, and the second (the Ex-Chair interviewed) was dismissed during the second sensemaking episode when a new Chair was forced onto the board by the investors.

As well as a consensual decision, i.e. to recapitalize and replace the CEO/Chair which was uncontroversial, the decision was taken swiftly when all the facts were presented to the board, with little requirement for debate around the subject or the need to suggest alternate options. The support and observation around the impactfulness and strength of leadership by this new Chair was affirmed by the CSO as illustrated by the quotation below:

This is the event really, unless something happened, this company would be out of business with the current team within the next two or three months, it was as short as that. There was no cash so the money would have run out so that's catastrophic failure (CSO, Pharmadev, first episode 2012).

There was no evidence of power game initiatives, but mutual respect to try and help: *"The CSO is one of the University's leading professors who needed support"* (Ex-Chair, Pharmadev, first episode, 2012). Everybody was engaged in their pursuit of the same goal: *"Everybody wanted to get a result"* (CSO, Pharmadev, first episode 2012); with a communal approach to problem solving: *"We {the board} consulted the scientists rather than imposing deadlines and they reacted very well to that"* (CSO, Pharmadev, first episode 2012).

Like the first open sensemaking episode of Drugtech, in this environment of open sensemaking a relatively swift (less than twelve months) consensual decision also is the result. All other decisions (if indeed decisions were made) took greater than twelve months with encapsulated sensemaking, discussed later.

Unlike the case of the first sensemaking episode of Drugtech, where the Chair was assisted in keeping the sensemaking open, in this episode the Chair took a more proactive and visionary role, with an emphasis on instilling confidence in the subgroups:

There was a rapid turnaround from a poor situation to a company that was sound with a strong Chair that directed the board (CSO, Pharmadev, first episode 2012).

In fulfilling this role, he created an environment, so the entrepreneurial managers and investor directors felt that they were duly represented in any decision-making:

The partial failure was reversed by a new Chair taking a differing view, which was positive to the outcome and working with the scientists and not against them, but imposing commercial deadlines (Inv Dir, Pharmadev, first episode 2013).

This resulted in efficient and effective board dynamics that gave solid, yet inclusive, direction from all directors on the board:

The new Chair announced during his first board meeting that he believed in the science and that he should be given three months to get the company into an investible state, which he did (CSO, Pharmadev, first episode 2012).

In summary, the Chair in open sensemaking episodes creates and maintains an open and fully inclusive environment where all directors are unfettered to contribute to the sensemaking episode, and all directors give and receive sense at will. I now turn to the episodes which resulted in forced decisions.

6.5.3 Forced decisions

Medco (first episode)

The first Medco sensemaking episode was triggered by the company missing a revenue target at an appointed time-point, which was a critical milestone for the investors. Some

actors believed that the business should be built through sensible acquisitions that would enhance the revenue and potentially make up the deficit, whilst others wanted to forge an exit, without acquisitions. So, there were potentially several options. Although this first sensemaking episode was protracted (taking twenty-one months), it eventually ended with the forced decision by the investor directors (Table 3.2) that no further acquisitions were necessary, since growth should be attainable from the existing operational base. The CEO here states that the Chair held this belief, and that it was in common with the investor directors. In this case, although there was observed allocentrism in that one of the investor directors had been an industrial CEO and had sympathy with the view of the CEO and her team, he was unable to sway the investor directors as a class (as observed from Chapter 5). Therefore, further acquisitions, although considered at subsequent boards, never formed a dominant frame in the sensemaking process:

It felt like a nonsense; it felt like there was a lot of back patting going on from the {previous} acquisition but the investor directors were continuing to think about their own positions with their investment funds and not the success of the company. I think being independent or not {none where} is very important to how the directors saw the business. I do not think the business was their main priority (CEO, Medco, first episode 2013).

The episode commenced with open sensemaking (sense been drawn from both subgroups and the Chair) and all directors took part in the board debate with the belief that the strategy was delivering results for the company, tracking its plan: “*Hugh observed a functioning board at this time*” (CEO, Medco, first episode 2013). As soon as the revenue target was missed, a debate commenced to consider whether alternate strategies were needed to replace the adopted strategy. Although numerous alternate strategies were considered to increase growth (acquisitions, new products or new markets), the board was unable to reach a decision and the attention turned to the

effectiveness of the Chair as a mediator. There was consensus from both subgroups and from the Chair himself that he was not sufficiently strong to mediate between the subgroups: *"I needed to get a bit more of a grip"* (Chair, Medco, first episode 2013). He also was allocating his Chair's time between two companies, which were competitors in certain aspects and as such was conflicted:

This was an uncomfortable time as the Chair also spread his time across both companies and he was conflicted and things started to go very wrong (CEO, Medco, first episode 2013).

During a period of open sensemaking and the earlier stages of encapsulated sensemaking (sensebreaking), the Chair was visible in creating and keeping an environment where he actively encouraged trust between all directors.

The Chair both during the board meetings and outside of the board meetings, spent time encouraging relationships of trust and openness which paid dividends (CEO, Medco, first episode 2013).

His weakness in assisting the board to reach consensual decisions became evident during encapsulated sensemaking (from the sensefreezing phase), when subgroups started to look to their own subgroups for sense, and preferring the way the world is viewed by their own subgroup compared to the other subgroup. Also during the period of open sensemaking, there was little evidence of power game initiatives which is one defining feature of open sensemaking, which remarkably changed as faultlines strengthened and encapsulated sensemaking emerged. As sensefreezing occurred, the board dynamics changed: *"The board meetings became ceremonial in nature and ritualistic in process"* (CEO, Medco, first episode 2013). The more powerful subgroup (the investor directors) started to confer and gather sense outside of the board meetings: *"Numerous telephone conversations were held outside of the board around potential weaknesses in the management team"* (Inv Dir, Medco, first episode 2013). This resulted

in further conversations between the investor directors outside of the board where they may have targeted other shareholders to attain either voting power to effectively control the company: *“Outside of the board meetings, there were discussions which could have been more helpful. They were maybe influencing shareholders in what could be seen in an underhand way”* (Inv Dir, Medco, first episode 2013). The Chair failed to prohibit the strengthening of faultlines promoting encapsulated sensemaking and the more powerful investor directors (even though the less powerful entrepreneurial managers disagreed with the decision) forced a board decision not to progress with any further acquisitions. The Chair failed in ensuring free information flow and creating an environment of trust, partly due to his own lack of credibility. It is the lack of trust that in fact stemmed the flow of information from one subgroup (the entrepreneurial managers) to the other subgroup (the investor directors).

Drugtech (second episode)

The second sensemaking episode commenced several years after the first episode which I discussed above under consensual decisions, when the board was divided on whether to proceed with further drug development. The sensemaking trigger was an unexpected board meeting pronouncement by investor directors to stop all drug development. This decision eventually led, after thirty-six months, to the suspension of operations and the company being put up for sale. In the second sensemaking episode, individual board members could neither control the board debate nor find communal plausible solutions from an understanding of the past events. The investor directors, to give sense, broke the sense as the entrepreneurial managers failed to accept the proffered option as plausible, as they had already obtained contrasting information directly from the investors relating to cessation of the clinical trial:

This decision was not expected. It caused anger among the non-executives and executive directors, frustration and discord on the board during that day (CEO, Drugtech, second episode 2009).

The Chair was clearly challenged as the expression of ideas and potential solutions were aggressively put forward by the investor directors with a refusal to listen to the views of the entrepreneurial managers:

The board became a less happy place. I think people were more guarded about what they said and what they thought (NED, Drugtech, second episode 2009).

Later, in this second sensemaking episode, the board became virtually paralysed, which was challenging to the Chair. The Chair failed to strongly mediate as evidenced by an inability to affect the sensemaking process:

One of the non-execs succeeded in taking over the meeting (NED, Drugtech, second episode 2009).

The lack of mediation skills became more pronounced as the episode progressed through a temporal sequence of events as elaborated in Chapter 4. As the board became less functional: *"I think the board was not very functional"* (CSO, Drugtech, second episode 2009). The Chair's position of mediation became paramount and if he either fails or was unable to act, then decision-making suffers: *"The Chair was helpless to do little about balancing the board"* (CEO, Drugtech, second episode 2009). This observation accords with the position taken by Surowiecki (2004) noted in the literature review, who suggests that there may be a problem with decision-making in small groups like entrepreneurial venture boards as aggregation of director opinion becomes difficult or impossible. In this encapsulated sensemaking episode, decision-making is paralysed, resulting in a forced decision led by the investor directors with the majority voting power to sell the company, over the less powerful entrepreneurial managers, who wanted to

continue to build the business. The Chair was unable to mediate as one of the investor directors increasingly dominated the board debate and the use of power became more evident, through the attempt to force the agenda by suggesting the investor had spoken to him prior to the meeting:

Mr A {an investor director} was very forceful and had considerable dialectical skills that could hold the floor at some length (NED, Drugtech, second episode 2009).

During the sensefreezing stage, powerful actors started to take entrenched positions:

One investor director {Mr A} had very strong opinions and was very difficult to dissuade once he had taken a point of view (CSO, Drugtech, second episode 2009).

During the senseforcing stage, the investor directors forced their position by taking the full voting rights of the investor through the suggestion that they stood in the shoes directly of the investor:

He (the investor director) represented the impression that it was the view of the investor and not his own personal view (to terminate the clinical trial) (CEO, Drugtech, second episode 2009).

This led to sensehiding, with the investor directors increasingly behaving as they were running the company by making decisions outside of the board meetings and sometimes then having made their decision outside of the board, they forced these decisions on the entrepreneurial managers during the board meetings:

The two investor directors met frequently to formulate plans to impose on the rest of the directors (Chair, Drugtech, second episode 2010).

Although the entrepreneurial managers did not make decisions outside of the meeting, they did review their legal position, which suggests their uneasiness over the situation:

The extent of power play (by the investor directors) made the entrepreneurial managers review the legals as they became nervous (CEO, Drugtech, second episode 2009).

So, ultimately the level of mistrust could not be repaired and the board became impotent. Decisions were merely imposed by the more powerful subgroup, leading to the production of a sale memorandum and ultimately a transaction to sell the company. The result of this transaction was the entrepreneurial managers bought back the assets (a management buy-out), as no trade purchaser was found and the management buy-out became a commercial possibility, in that the assets were sold at a heavy discount to book value.

So in summary, In these cases where forced decisions were observed, the Chair failed to prohibit encapsulated sensemaking. Maybe a change in board appointment or an early conversation between the Chair and the investor could assist in maintaining open sensemaking. I now turn to those episodes where no decision was made or there was a period of protracted indecision, resulting in terminal failure.

6.5.4 No decision or indecision leading to failure

Medco (second episode)

The second sensemaking episode was triggered by a further missed revenue target (the first sensemaking episode also started with a missed revenue target). This sales decline continued for forty-eight months, until the company eventually went into administration. Numerous differing views were proffered to explain deviation in sales, resulting in a protracted period of indecision. In the cases like this, where numerous differing views were expressed, resulting in the availability of numerous explanations and deviations, the importance of the Chair increases. The lack of organic growth or any further acquisitions led to insufficient growth to meet the business plan. The business underperformance then led to the CEO's attempt to manage the shareholder base:

There was a huge amount of shareholder and management discussion and relationships were quite fractious at points with certain investors (Chair, Medco, second episode 2013).

Although there was debate about the underperformance, this was discussed outside of boards by the investor directors, who had made a communal decision that they did not want to bring this to the board. They were all supporting closed-end funds and hence their portfolio track record took precedence for them compared to individual company performances. They preferred to believe that a transaction would generate the necessary return. Finally, this lack of agreement and the inability of the board to make a consensual decision led to the failure of the company:

It became more apparent as the time passed that the board became dysfunctional, something the Chair could have controlled better (CEO, Medco, second episode 2013).

Even the Chair retrospectively agreed he had lost the leadership role in the board: *“I found that it was really difficult to keep control”* (Chair, Medco, second episode 2013). This was also observed by one of the investor directors who even initiated a call to remove the Chair. *“The investor directors asked: Do we need to alter the board composition and especially the Chair?”* (Inv Dir, Medco, second episode 2013). The same investor director made his views clear on the Chair: *“When you are in trouble, you need a little bit of dynamism and he did not hit that dynamic”* (Inv Dir referring to the Chair, Medco, second episode 2013). The Chair in this episode not only lost control of the confidence of the investor directors, even though he was recruited by the investor and de facto the investors, but also the entrepreneurial managers, and he himself acknowledged that he had lost the respect of the board. This lack of orchestration and no counteraction towards strengthening faultlines resulted in the promotion of encapsulated sensemaking by subgroups of board members.

There were numerous power play initiatives as strengthening faultlines promoted encapsulated sensemaking. Their power plays added to the sensefreezing phase: *“Some investor directors did not deal with the underperformance in a transparent manner – hence paralysing board discussions”* (CEO, Medco, second episode 2013). The board became impotent: *“They {the board members} did not add anything positive to the company”* (CEO, Medco, second episode 2013). The investor directors used power during the senseforcing phase: *“The investor directors forced an external body onto the company to oversee the sales process”* (CEO, Medco, second episode 2013). Although power game initiatives were used outside of the board meeting during the sensehiding phase: *“It all became a little bit suspicious outside of the boardroom, which got worse over time”* (Chair, Medco, second episode 2013). These once hidden conversations were then played out in the board room reinforcing the interplay (both ways) between senseforcing and sensehiding: *“Some of the hidden discussions behind closed doors were then expressed at board meetings – the investor directors wanted an exit and became unmovable in their opinion”* (Chair, Medco, second episode 2013). In this case, what had been discussed in secrecy of initially the most powerful subgroup, the investor directors, became an unmovable position at subsequent boards: *“The largest two investors wanted to exit, they became entrenched in that position and would try and bring other investors around”* (COO, Medco, second episode 2013). This position led to an impotent board being unable to reach a decision, before it was too late and the administrators were called in to eventually wind up the company. Whereas in the previous episode, the board reached a forced decision; in this instance, the indecision to sell the company meant that when it was eventually put up for sale, it was too late to find a suitable partner. So even though a decision was made to sell the company, the period of indecision was so protracted to make the final decision to sell somewhat meaningless, as it was inevitable the company was heading into receivership.

Pharmadev (second episode)

The trigger for sensemaking in this episode was the point at which the company missed a revenue target at an agreed time, and consideration of what options were available were debated by the board. The second sensemaking episode lasted thirty-six months and during that time the board became more dysfunctional, with no agreement whether it should be sold or grown. These non-decisions were driven by the disengagement of the board members and a change in strategic direction which lost credibility with the lead scientific team:

The change in direction was indeed driven by the VC funder (CSO, Pharmadev, second episode 2012).

It was clear to the existing board members that the forum for open debate was closed, and a more dictatorial regime had commenced: “*You will do it my way*” (Inv Dir, Pharmadev, second episode 2013). This led to the imposing of new board members, effectively resulting in a board that was split between the old guard and new guard. The new guard were a set of directors (the investor directors) who represented the investors and wanted to sell the company; the old guard were the entrepreneurial managers who wanted to grow the company and raise another round of funding. A significant driver of the actions of the investor directors was the portfolio view of the investor which they represented, who required an exit:

The seed capital was injected in small amounts against milestones and by the time we came to attempt to sell the company, all the funds were maxed out, and that was another reason an exit was the only available option (Inv Dir, Pharmadev, second episode 2013).

This need to exit became paramount and drove the sensehiding, destroying virtually any sense-receiving between the investor directors and the CSO. The Chair had been appointed by the venture capitalists, but the venture capitalists had appeared to have lost

confidence in the Chair as they continued to use their powers to appoint further investor directors, and the Chair held no respect from the entrepreneurial managers as he had no scientific knowledge. The commercial management team members had also been catapulted in by the venture capitalists, which further isolated the scientific members, and hence caused a totally dysfunctional board and all strategic decisions were taken outside of the tabled board meetings. This was observed by both the CSO and an investor director:

He {an entrepreneurial manager} undermined the Chair in respect of not having the scientific background in this field that was necessary to lead the company to success and left the Chair somewhat impotent (CSO, Pharmadev, second episode 2012).

On further parachuting of investor appointed investor directors, key members of the board already had opinions on the motives of the new investor director and did not view him as an independent director that sought to look for solutions that were in the best interest of all shareholders:

The Chair and CSO observed this event with some suspicion and hostility (referring to the addition of a new investor director) and they could do little to manage this new director (CSO, Pharmadev, second episode 2012).

This lack of respect for the Chair led to a breakdown of relations between the Chair and the new investor director, which meant there was no attempt to integrate the views of the new investor directors into board debate. This alienation of the new investor director led to an inefficient and ineffective board decision-making process with potentially further sensemaking to understand the board complexities as well as underlying issues:

There was a more complex situation than before producing weak board dynamics (Inv Dir, Pharmadev, second episode 2013).

There was a great deal of power play observed in this episode, as demonstrated by the degree of senseforcing: *“So it was kind of a bullet to the head, a gun to the head, in terms of accepting one of the nominees {to become another investor director}”* (CSO, Pharmadev, second episode 2012). This was superseded by a significant amount of sensehiding: *“There was connivance in abundance behind the scenes”* (CSO, Pharmadev, second episode 2012). These power game initiatives became known to the entrepreneurial managers which only led to deepen the mistrust: *“As the ex-Chair has already said, Mr X {an investor director} used to play games really using the investor’s viewpoint, and he was quite devious really which did not always help”* (CEO, Pharmadev, second episode 2012). As seen in the second episode of Medco, the second episode of Pharmadev also ended in terminal failure with the board impotent to reach a decision. The indecision was preceded by a forced decision in a previous episode, which led to mistrust, which only helped to fuel the lack of sensereceiving between the entrepreneurial managers and investor directors.

In summary, there is strong evidence that if the Chair allows encapsulated sensemaking to persist, the likelihood of consensual and swift decisions abate to the extent that the board may become impotent and the company is at risk of terminal failure.

Table 6.5 below summarises the above cases and indicates the patterns between decision-making, the role of the Chair in mediation and controlling power play and the link to sensemaking.

Episode (Sensemaking type)	Decision	Mediation strength of the Chair	Evidence of power games
Drugtech (1) (Open sensemaking)	Consensual	Strong	Not observed
Pharmadev (1) (Open sensemaking)	Consensual	Strong	Not observed
Medco (1) (Open sensemaking/ Encapsulated sensemaking)	Forced	Strong to weak (moving from open to encapsulated sensemaking)	None to multiple (>5)
Drugtech (2) (Encapsulated sensemaking)	Forced	Weak	Multiple (>5)
Medco (2) (Encapsulated sensemaking)	No decision	Weak	Multiple (>5)
Pharmadev (2) (Encapsulated sensemaking)	No decision	Weak	Multiple (>5)

Table 6.5: Decision-making and the role of the Chair in mediation and power

6.6 Discussion

6.6.1 Decision-making

The coding and analysis indicates that there are differing decision-making outcomes from the observed sensemaking processes. The first type of outcome is in the form of a decision made by the board of the company, whether a consensual or forced decision. This outcome is seen in the cases of the first and second episodes of Drugtech, the first episode of Medco and the first episode of Pharmadev. The second type of outcome is the form of indecision whether that is due to the paralysis of the board through discrediting alternate solutions or no plausible solution being tabled for the board to duly consider. This second outcome can also include no decisions being made due to sense being hidden from at least one subgroup of the board, so there is no collective board

sensemaking on the topic as one subgroup is unaware of the issues. This outcome is seen in the second episodes of Medco and Pharmadev.

The sensemaking episodes from the first episode of Pharmadev and the first episode of Drugtech end in swifter consensual strategic decisions, with the episodes lasting no more than nine months, leading to a changed course of action and giving the companies fresh objectives. The sensemaking episodes from the other four episodes lead to enduring multiple accounts of events (covered in Chapter 5) with resultant forced decision, indecision or no decision. The production and working through of multiple accounts becomes even more time-consuming when the varying components of the encapsulated sensemaking process are engaged. In all cases where multiple accounts develop and alternate versions of the narrative become competitive, encapsulated sensemaking is evident. The components of encapsulated sensemaking were elaborated in Chapter 4, suggesting that the components are not generally positive towards achieving goal congruence in entrepreneurial ventures. The data analysis in this Chapter demonstrates that in all cases of encapsulated sensemaking, the outcome was that of a forced decision, indecision or no decision. This is in stark contrast to episodes of open sensemaking that led to swift consensual decision-making, in which the components are generally positive in entrepreneurial ventures towards achieving goal congruence.

If the Chair has taken a position to side with the investor directors or indeed the entrepreneurial managers, he has a challenge to maintain sufficient credibility with both sides, especially if two strong faultlines have been activated, to turn around a board. This results in a dysfunctional, ineffective and non-directional board with a denial to consider issues derailing the process of open sensemaking, in that chaos is ignored instead of triggering the search for sense and the actors look to their subgroup for sense in deepening encapsulated sensemaking. Ironically, the Chair could see the problem but at the time felt impotent to act. In both the cases of Medco and Pharmadev, where the

boards became more dysfunctional and after sensehiding initiatives had been employed, there was a decline, ultimately into failure. It is evident from this study that the Chair must create the right environment to keep sensemaking open, otherwise it may be very difficult to reverse encapsulated sensemaking to open sensemaking, as there is little evidence of this occurring once encapsulated sensemaking passes beyond the sensebreaking phase, as this is the phase where mistrust commences in the encapsulated process.

6.6.2 Comparison of Chair leadership positions

For Drugtech (first episode), Pharmadev (first episode) and the early part of Medco (first episode); all open sensemaking episodes, the board was considered functional and director interaction was considered healthy, constructive and value adding with resultant positive effects on the company's performance. This was not a passive occurrence as the Chair in several cases helped to create the right environment. In all other encapsulated episodes, the Chair became more visible, but ineffective, and is engaged in competitive conversations where actors are attempting to gain a dominant position. The performance of the Chair appears to be regularly questioned and the Chair is more likely to have to deal with a dysfunctional board. It appears that in these contested episodes, the Chair is truly tested and may make the difference between leading the board to a consensual decision or a route to failure. However my study demonstrates that in all contested episodes, no consensual decision was reached. So, if possible, the Chair needed to do more to maintain an open sensemaking environment, which I now cover, whilst considering the Chair as a mediator.

6.6.3 The Chair as a mediator

There is a notable difference between chairing in open sensemaking episodes opposed to chairing in encapsulated sensemaking episodes. There is a requirement for the Chair to mediate in encapsulated sensemaking episodes, as swifter decision-making is observed during open sensemaking episodes and indecision or lack of decision is

observed during the longer encapsulated sensemaking episodes. It may be that there is a period during sensebreaking where the process can be reversed, and certainly it is evident from this research that once sensefreezing and senseforcing is reached, it is too late as there is no evidence of reversal at this stage back to open sensemaking. Beyond sensebreaking, the venture is often left with an ineffectual board that cannot be changed, other than restructuring by changing individual board members. There were no observed cases where senseforcing and sensefreezing did not progress to sensehiding within encapsulated sensemaking episodes (Chapter 4) and hence further empirical work is needed to further understand the potential reversibility between encapsulated sensemaking to open sensemaking. In Medco, the Chair was initially a non-executive director and replaced one of the scientific founders that was initially in that role. He often saw the challenges facing the company in a different way to the other parties and sometimes aligned himself to one actor or groups of actors but not consistently throughout. Open sensemaking was observed with one of the investment directors taking a sympathetic view of the position of the entrepreneurial managers. Nevertheless, the other investor directors were not convinced as a group by the argument and were egocentric, so their view prevailed, and led to encapsulation. If the Chair had been a stronger mediator, there may have been a better chance of a fuller board debate leading to a more consensual decision and some alleviating of the feeling that the entrepreneurial managers had not had a fair and thorough hearing.

Similarly, during the second episode at Pharmadev the Chair showed professional affiliation to large corporations and this affiliation led to the inability to see through others' lenses. The Chair's weakness as a mediator led in part to the strengthening of the faultline from weak to medium between the first episode and the second episode, when the investor directors aligned as an egocentric stereotypical class with no interest of business building, but merely entirely focussed towards an exit.

However, in contrast to Medco and Pharmadev, the first episode of Drugtech ended in a swift consensual decision, which was brought about to some extent by a Chair, whose mediation skills appeared to be strong and an allocentric CEO acting in the role of an investor director.

My research has shown that attaining open sensemaking is through a mechanism of open debate and all steps should be taken to avoid encapsulated sensemaking or to reverse encapsulated sensemaking to open sensemaking, if possible, and as quickly as possible. Once encapsulated sensemaking endures for a period, there is more likelihood that sensegiving initiatives will be used by powerful actors to gain a dominant frame, and progressively sensegiving initiatives that make the Chair's role in reaching consensual decisions harder as sensegiving initiatives move from sensebreaking to sensefreezing and senseforcing to sensehiding.

It is clear from the empirical data from my study that the Chair may have an influence on the board dynamics. In considering the Chair, I have concluded s/he may have a pivotal role in orchestrating the board towards open sensemaking and diverting harmful sensegiving initiatives, which s/he may or may not succeed in, depending on the ability to comprehend sensemaking and further to have the ability and power to be able to act on comprehension; and in doing so add to this body of literature. My empirical study presented in Chapter 4 presents the temporal phases of encapsulated sensemaking shown in Figure 6.1. It is the Chair's ability to guide the board back to open discussion (as presented in the section on the boardroom leadership by the Chair) which leads to a greater potential for consensual decision-making. In the study by Strike & Rerup (2016), they capture how mediators facilitate sensemaking by regulating the pacing and temporality of entrepreneurs' sensemaking. This study confirms that the mediator in the form of the Chair can also affect sensemaking pacing as decision-making is swifter in

open sensemaking than in encapsulated sensemaking and can be affected by the mediation skills of the Chair.

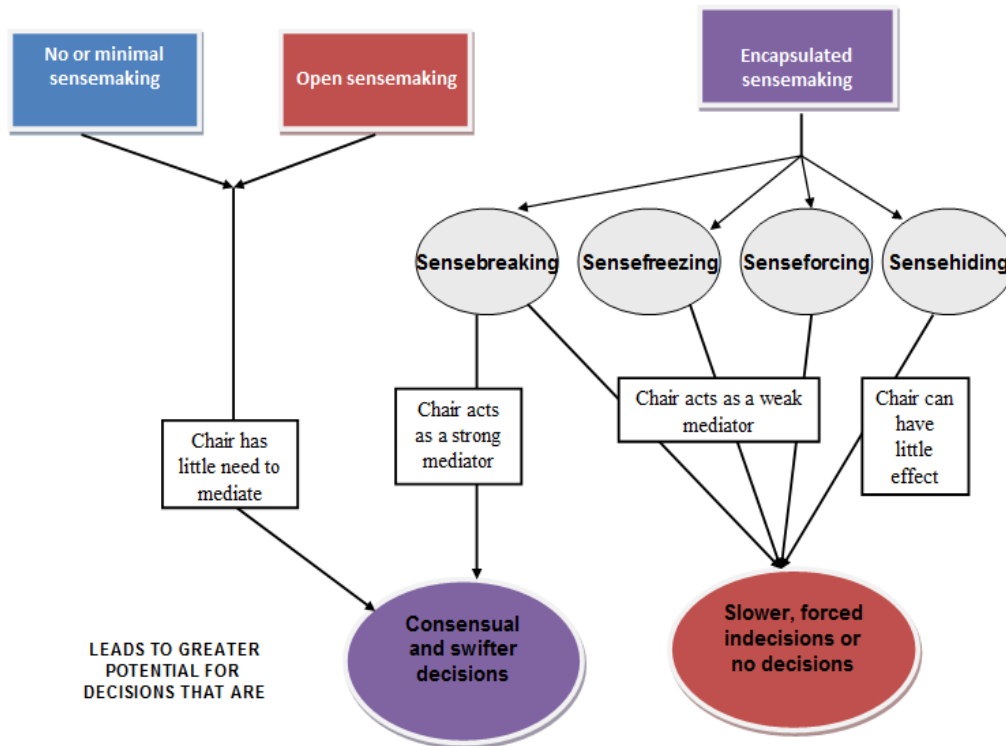


Figure 6.1: The relationship between sensemaking, mediation by the Chair and decision-making

I make the observation above that as encapsulated sensemaking progresses through the discrete phases, power game initiatives are employed; and the Chair is confronted with the need to control these games to reach decisions. I now consider the ability of the Chair to control these power games.

6.6.4 The Chair and control of power

The first dimensional view assumes power cannot be taken for granted and is to be observed empirically, which is useful in the context of this research being based on empirical studies of entrepreneurial ventures. In this case, the focus of power is

determined by whose decision (or which subgroup's decision) prevails to become the outcome through decision or indecision of the sensemaking process. In this pluralist approach, *"an attempt is made to study specific outcomes to determine who actually prevails in community decision-making"* (Polsby, 1963 113). The emphasis in this first dimensional view is on *"concrete observable power"* (Lukes, 2005 17). The focus on observable behaviour in identifying power involves the pluralists in studying decision-making, as their central task. For Dahl, power can only be analysed after careful examination of a series of concrete decisions (1958 466). Polsby further argues that *"who prevails in decision-making seems the best way to determine which individuals and groups have more power"* (1963 4). In this context, *"decisions involve direct (actual and observable) conflict"* (Lukes 2005 18). This first dimension is seen around the board table where vigorous and contested debate is more likely during early periods of encapsulated sensemaking, where sensebreaking may be used to influence opponents to abandon or dilute their position through the breaking down of their sense. Sensebreaking is observed to be used during the first few months of encapsulated sensemaking and is an attempt around the board table to find a decision through active and open debate. The actors, however, look to their own subgroups for sense, as described in Chapter 5, and the power of the subgroup relates to the strength of the faultline, which depends on the economic capital of the subgroup.

Two-dimensional power *"involves examining both decision-making and the absence of decision-making"* (Lukes, 2005 22). In the context of the work of Bachrach & Baratz (1970) who critique the pluralists' one dimensional view of power, power is often confined to decision-making in overt safe issues (1970 6), and that non-decisions can stem from power use that allows for *"consideration of the ways in which decisions are prevented from being taken on potential issues over which there is an observable conflict of interests"* (Lukes, 2005 25), as seen in sensefreezing. The typology of power in this

second dimension of power embraces coercion, influence, authority, force and manipulation (Lukes, 2005 21), which is observed in senseforcing.

As stated in the introduction to this Chapter, Schwartz (2005) considers the third dimension of power. This covers several types of *“power over people, including both positive and negative influences”* (3), which includes issues that can be neglected in decision-making, since they tend to be associated with issues that never reach a point of decision-making or are never fully acknowledged. This would be the case in latent conflict, which consists of a contradiction between the interests of those exercising power and the real interest of those they exclude. Such manipulation and exclusion mean that decisions are in fact not brought to the board because they are hidden from certain actors, which equates to sensehiding. The reason decisions are not brought to the board is that any debate around the problem is not tolerated by at least one subgroup of directors. In the case of this empirical data, the hiding is performed by the actors with the greater economic power, namely the investor directors and the management parachuted into ventures by investors to enact the investors’ agenda, and is hidden from the entrepreneurial managers on the board, so to appear that there is no decision to be made. The data expressed in Table 6.8 shows the temporality of sensemaking components during encapsulated sensemaking episodes, which are consistent throughout all encapsulated sensemaking episodes. I express this relationship below schematically in Figure 6.2:

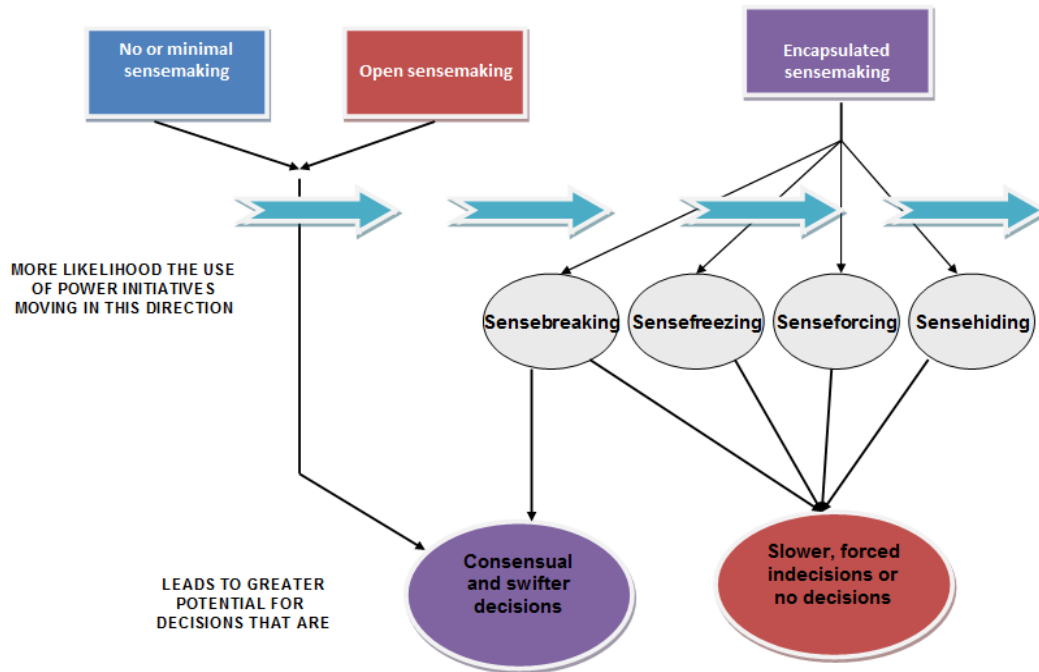


Figure 6.2: The relationship between sensemaking, power and decision-making

Power game initiatives have been clearly shown to influence the process when sensemaking moves towards stronger encapsulation, as shown in Figure 6.2. Considering the empirical work and observations from Chapters 4 & 5, actors use their economic capital as currency to employ power initiatives and obtain their ability to enter the power game through such economic capital. I observed power game initiatives being used predominantly by investor directors and management who had been parachuted into a company by the investors to effect change and implement the agenda of the investor. This is the case in all observed encapsulated sensemaking episodes, and it is the actors with stronger economic capital (the investor directors) who use power play initiatives to gain dominant framing, and actors with stronger economic capital have the currency to employ power games in that they can influence by increased voting power either as a threat or by tabling a resolution for a board vote. Actors who possess strong

economic capital are more likely to employ power game initiatives opposed to actors with weaker capital during encapsulated sensemaking.

6.7 Conclusion

In this Chapter, I have considered how the directors of the boards of entrepreneurial ventures share or withdraw their actions and language to position their viewpoints prior to decision-making. There are two distinct processes that stem from whether sense is gleaned openly or whether subgroups of directors look to their own subgroup, as that subgroup views the world in an aligned manner, to sensereceive from and senseblock opposing subgroups on the board (refer to Glossary for definitions). Consensual decision-making becomes more remote the further through the encapsulated sensemaking process the sensegiving initiatives progress. A reason for this remoteness is the influence of power and the building of mistrust, already considered.

It is more likely sense is created and received in open sensemaking episodes, while all contested episodes in encapsulated sensemaking episodes exhibit sensegiving initiatives that destroy sense and inhibit sensereceiving, which I define as senseblocking defined from the empirical data as: “The use of collective sensegiving initiatives that are observed in encapsulated sensemaking inhibiting the restoration of order”.

A way of destroying sense is through powerful actors (those that possess strong economic capital) ignoring the sense of others around the board if they have taken a position, whether that position has been verbally expressed or not. They are also the main actors who lead on sensehiding initiatives. Open sensemaking is more likely to result in progressive sensereceiving with consensual decision-making as an outcome, whereas encapsulated sensemaking is more likely to result in progressive senseblocking, with forced or no decision-making as an outcome. There is the potential for the Chair to mediate in the hope of promoting open sensemaking or encouraging directors to refrain

from sensegiving initiatives observed during encapsulated sensemaking in this study, which may be the difference between success and failure. I further consider how the Chair may achieve this aim during my discussion on the contributions to practice in Chapter 7.

CHAPTER 7: CONTRIBUTION TO THE LITERATURE AND PRACTICE

7.1 Introduction

In this thesis, I have examined the socio-cognitive processes of sensemaking in entrepreneurial ventures. In doing so, I have presented new processes with discrete phases for both encapsulated and open sensemaking. I have explained the nature of the relationships between actors' social positions and their sensemaking in entrepreneurial ventures through faultline activation and strengthening. I further considered the relationship between the role of the Chair in decision-making during sensemaking episodes; especially considering the mediation skills of the Chair and the Chair's ability to control powerful actors, to ensure a balanced debate.

As stated in the Introduction, I set out to address gaps in the literature as follows: Firstly, the literature on sensemaking and entrepreneurship (as with the literature on sensemaking *per se*) fails to deal with the issue of context in terms of how it shapes stakeholders' cognitions. Drawing on the work of field theory, and particularly the work of Bourdieu, I have addressed this gap by exploring how the content of stakeholders' cognitions is shaped by their social position in a field (Chapter 5). Secondly, the literature on sensemaking does not address the issue of power in an explicit sense. In this study, I have linked power to sensegiving components and explained how it shapes and is shaped by these social processes (Chapter 4). Thirdly, the literature on sensemaking and entrepreneurial ventures has tended to focus on entrepreneurs' sensemaking about terminal failure. In doing so, the focus has been on sensemaking after the terminal failure. In contrast by examining sensemaking during and following adverse deviations from the business plans (i.e. partial failure), I am able to explain the circumstances that facilitate and prevent partial failures from turning into terminal failure. Fourthly, the existing literature has only recently considered the sensemaking of a broader range of stakeholders (Maitlis, 2005), with the need to consider differing contexts. To further

address this gap, I have examined sensemaking from the perspective of different stakeholders in entrepreneurial ventures; the entrepreneurial managers (representing the company and its staff) and the investor directors (representing the venture capitalists). Finally, the literature on sensemaking and entrepreneurship needs to further consider the socially negotiated processes of sensemaking, and how they may shape the unfolding of an event. By drawing on the work of Maitlis (2005) and others around the social processes of sensemaking, I have explored these social dynamics and how they unfold in practice.

The following research questions were considered. How does sensemaking unfold in entrepreneurial ventures and how do encapsulated and open sensemaking processes differ? (Chapter 4). What is the nature of faultlines in entrepreneurial venture boards and how do faultlines promote encapsulated and open sensemaking in entrepreneurial venture boards? (Chapter 5). Does sensemaking affect decision-making, how does the Chair influence this relationship through mediation and is there a relationship between the use of power and sensemaking that affects decision-making? (Chapter 6).

In addressing these questions, I summarise the contributions of this thesis in this Chapter. I initially detail the patterns across the sensemaking episodes with the purpose of pulling the themes together to consider the contribution to the literature, and then explain how my findings generate practical insights that can inform practitioners.

7.2 Patterns across the sensemaking episodes

I consider below the patterns observed across the six sensemaking episodes.

In two cases, I observed a harmonious and agreeable social process, leading to a swift unitary outcome of a consensual strategic decision. In four cases, I observed a highly contested social process, leading to multiple potential outcomes of indecision or no decision. In contrasting these patterns, I present two processes outlined below. Encapsulated sensemaking is typified by the phases of sensebreaking, sensefreezing,

senseforcing and sensehiding and is likely to endure longer than open sensemaking episodes resulting in a forced decision, indecision or no decision. In contrast, open sensemaking is typified by the phases of accommodating, comprehending, positioning and accepting and is likely to result in swifter consensual decision-making compared to periods of encapsulated sensemaking.

Within all cases, I observe the actors around the board table during sensemaking episodes. Actors' sensemaking is shaped by their social positions and disposition leading to different accounts that promote either encapsulated or open sensemaking. Differences in sensemaking accounts can endure, leading to paralysis and in some cases dysfunctional activity and conflict where directors block sense from board members of opposing subgroups representing strong faultlines (i.e. encapsulated sensemaking). Collective sensemaking is facilitated by directors' ability to better understand the different realms of science, commerce and finance, and to accept the receiving of sense from all board members (i.e. open sensemaking).

7.3 Contribution to the literature

There are a number of findings from this thesis, which are worthy of comment.

Firstly, sensemaking is a social process, which requires an understanding of the underlying social processes in play. Actors' capital and dispositions shape their sensemaking, in both encapsulated and open sensemaking forms. Bourdieu (1986, 1990) is not new to literature on entrepreneurship, but his theory of practice has not been extended to an understanding of faultline composition. I use Bourdieu's work to extend the faultline literature by considering Bourdieu's concepts of economic, cultural and social capital as well as to form a link to dispositions (Bourdieu & Wacquant 1992) to explain certain antecedents to faultline formation. Lim *et al.* (2013), suggests that a faultline perspective offers an important alternative to the principal-agent perspective to understand new venture team dynamics. I add to this literature by providing insight into

why these faultlines may emerge in shaping the sensemaking process. I extend the literature (particularly Chrobot-Mason *et al.*, 2009; and Jehn & Bezrukova, 2010) in demonstrating further negative repercussions of strong faultline formation, in the context of entrepreneurial ventures.

Secondly, failure is more likely to occur when sensemaking is encapsulated and less likely when it is open. The identification of new phases within encapsulated and open sensemaking which exhibit the same temporal relationship in all observed cases should assist in both understanding progressive failure but lead to the potential to avert terminal failure. As stated in Chapter 4, Sandberg & Tsoukas (2015: 20) state the four general areas in their critique of sensemaking that require addressing which are as follows: *“There requires further work on process as the notion remains relatively vague, the concept of sense is insufficiently developed, sensemaking overlooks the larger context in which it takes place”* and *“sensemaking reduces reality to subjective understanding”*. I have considered new components for both encapsulated and open sensemaking and, in doing so, have added to the sensemaking literature, and removed some of the vagueness and further developed the concept of sense leading to positive and negative outcomes. I have outlined as much around the disruption of sense as around obtaining sense and have indicated that most sensegiving initiatives within encapsulated sensemaking lead to disruption, paralysis or obstruction to decision-making. In contrast, I have shown that no or limited sensegiving is used in open sensemaking and there is more likelihood of consensual decision-making as a result. The Weickian view (1993) of sensemaking involves the restoration of order from chaotic situations, however this view cannot be universally applied to all sensemaking processes. The Weickian view, as is evident from the evidence presented here, aligns with open sensemaking processes within the context of entrepreneurial ventures restoring goal congruence from equivocal positions.

Thirdly, in encapsulated sensemaking, power game initiatives are more likely to derail the open sensemaking process leading to failure. Although there is research on power game initiatives and sensegiving by managers (Maitlis & Lawrence, 2007), which acknowledges that persuasion and meaning creation are key parts of strategic management, little research has been carried out to consider confrontational sensegiving (Drori & Ellis, 2011), and no attempt has been made to link the dimensions of power to sensegiving initiatives in confrontational situations. I suggest a relationship between the dimensions of power as characterised by Lukes (1974) and progressive sensegiving initiatives employed during encapsulated sensemaking, which adds to the sensemaking literature.

Finally, the Chair may mediate board processes towards open sensemaking suggesting a greater potential for board directors to make earlier consensual decisions. This is further considered in section 7.4 on practical insights.

I present two process models, illustrating the discrete phases of both encapsulated and open sensemaking. In encapsulated sensemaking episodes, if sensebreaking, sensefreezing or senseforcing have been ineffective in producing a dominant frame (i.e. a narrative that is accepted whilst others are rejected), sensehiding may be employed. Sensehiding refers to the process of consciously avoiding certain discourses while managing change (Mahapatra & Pattnaik, 2013). In the context of the entrepreneurial ventures I studied, sensehiding manifests itself in predestined actions of orchestrating meetings among subgroups of actors outside of the boardroom to formulate plans and agendas to meet the purpose of that subgroup. In this phase, decisions are averted from ever being tabled at a board meeting through not allowing the underlying information to be brought out into the open from meetings away from the company boardroom. The agenda is firmly in the hands of the actors with the greatest economic capital, with little or no input into the debate by the less powerful actors. There is no shared action between

groups, as the group with the greater economic capital seeks to exert influence by hiding their position from the group with the weaker economic capital position, by not declaring their views until a later board meeting. All interpretive tasks are now dependant on whether there is any trust remaining. If the two subgroups are so untrusting of each other then it will be unlikely that a balanced and efficient board will function again with the current board members, and hence if possible should be avoided. In contrast, the four phases of open sensemaking (accommodating, comprehending, positioning and accepting) all involve the passing of sense from all actors, irrespective of whether they belong to investor directors or entrepreneurial managers. This fully inclusive dialogue leads to swifter consensual decision-making, with board directors that have been given the opportunity to express their views openly and freely. The board environment encourages the interchange of free and frank ideas. There is no or little need for compiling competitive argument because narratives are built in a consensual and social manner, using additive data and information introduced by the actors. There is little requirement for power game initiatives to be employed as actors reach their required acceptable narrative of the episode, with options for solutions, with little need to attempt to influence. Tasks are fully inclusive with outside parties only used to complement or verify the narrative, rather than to oppose or deny it. Sensemaking is swift (taking months, not years) with no blame tactics and an ongoing lengthy search for plausible options to close the gulf. It is possible that through this process, the social need to make sense commences immediately and depending on the deemed severity and urgency, sensemaking can close the gulf in the delivery of new goals. Hence where possible, open sensemaking should be promoted and encouraged. These contrasting forms of sensemaking present in differing processes with discrete phases in the context of entrepreneurial ventures. I present these contrasting processes in Chapter 4, and duplicate below, in pulling my conclusions together.

Phases of encapsulated sensemaking

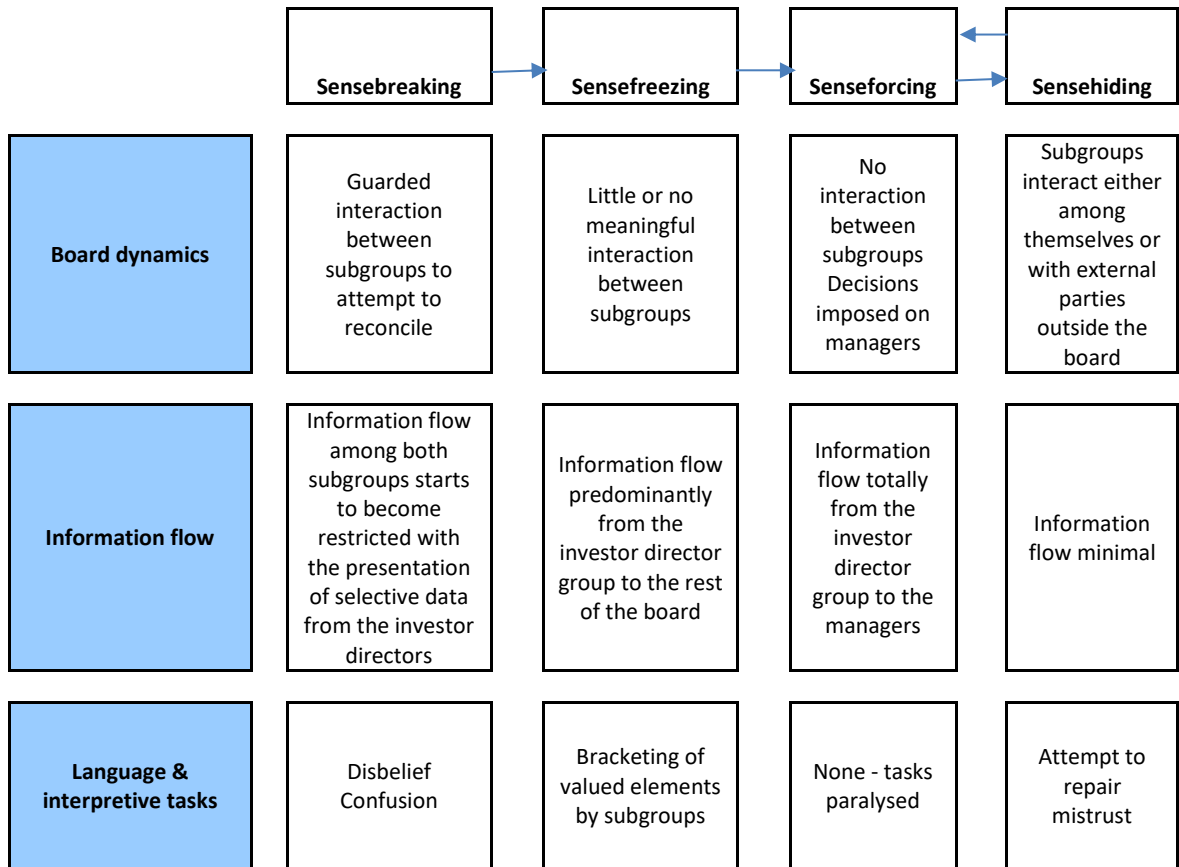


Figure 7.1: A process model of encapsulated sensemaking in entrepreneurial ventures

Phases of open sensemaking

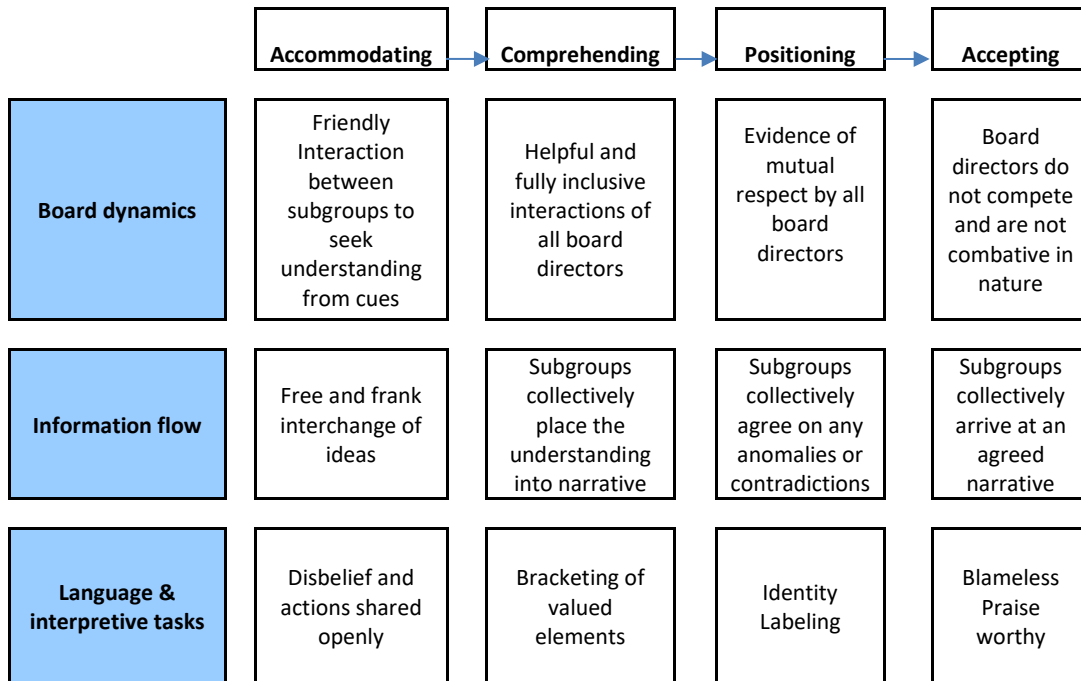


Figure 7.2: A process model of open sensemaking in entrepreneurial ventures

My study has indicated a relationship exists between sensemaking types and faultline strength and activation. A new model is proposed (Figure 7.3) to link sensemaking to faultline formation with a resultant impact on the presentation of the accounts, whether they present in unitary or multiple accounts.

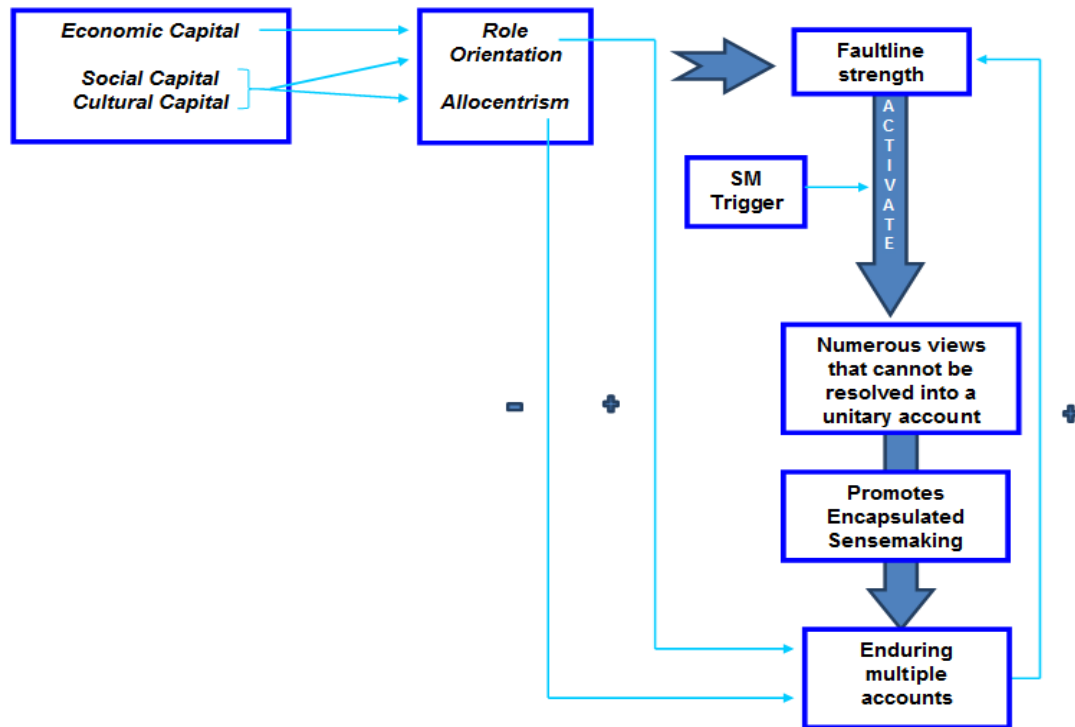


Figure 7.3: The relationship between faultlines and encapsulated sensemaking in entrepreneurial ventures

Note: All italic text contributes to faultline strength and unitary and multiple accounts were dealt with when considering sensemaking in Chapter 4

One strong influence on encapsulated sensemaking, along with the likelihood of faultline strengthening is that of the progressive use of sensegiving initiatives by powerful actors. In presenting the following Table 7.1, I suggest a relationship between power and the encapsulated sensemaking phases (from Chapter 4) and decision-making (from Chapter 6). Table 7.1 positions the sensemaking phases of encapsulated sensemaking in a temporal sequence and the use of these components align with the three dimensions of power. The order of employing power play initiatives is likely to follow the first, second and third dimension of power aligning with the temporality of sensemaking components. Crozier & Friedberg, (1977) suggest that power games are used by actors to manipulate other actors within the power structure. This assertion is extended by Drori & Ellis (2011)

that sensegiving can be used by actors via power games for the sake of construction of meaning that may influence others. As already stated, my research adds to this literature through the suggestion that various forms of sensegiving can be aligned to the dimensions of power as outlined by Lukes (1974).

Sensemaking components	Dimension of power	Decision-making potential
Sensebreaking	1	Decision-making
Senseforcing and sensefreezing	1 & 2	Decision-making and no decision making, including coercion, influence, authority and force
Sensehiding	1, 2 & 3	The dimension that can avert potential decisions reaching the decision-making stage

Table 7.1: Encapsulated sensemaking, power and decision-making

I also considered the role of the Chair in mediating to restrain faultlines from strengthening and in turn promoting encapsulated sensemaking, and in controlling the use of power games by powerful actors. The following Table 7.2 represents the relationship between decision-making, the role of the Chair and sensemaking type.

Episode (Sensemaking type)	Decision	Mediation strength of the Chair	Evidence of power games
Drugtech (1) (Open sensemaking)	Consensual	Strong	Not observed
Pharmadev (1) (Open sensemaking)	Consensual	Strong	Not observed
Medco (1) (Open sensemaking/ Encapsulated sensemaking)	Forced	Strong to weak (moving from open to encapsulated sensemaking)	None to multiple (>5)
Drugtech (2) (Encapsulated sensemaking)	Forced	Weak	Multiple (>5)
Medco (2) (Encapsulated sensemaking)	No decision	Weak	Multiple (>5)
Pharmadev (2) (Encapsulated sensemaking)	No decision	Weak	Multiple (>5)

Table 7.2: Decision-making and the role of the Chair in mediation and power

My inductive analysis suggest the following propositions, which need to be further considered in both larger samples and other contexts. The first proposition relates to the relationship between types of sensemaking and the likelihood of outcomes in the form of decisions made or indecision or decisions delayed.

P1: Encapsulated sensemaking:

- (a) Reduces the likelihood of swift, consensual decision-making*
- (b) Increases the likelihood of forced decision-making, indecision and no decision*

Open sensemaking:

- (c) Reduces the likelihood of forced decision-making, indecision and no decision*
- (d) Increases the likelihood of swift, consensual decision-making*

My empirical data further suggests the Chair may have a conscious mediation effect on the sensemaking process to affect differing outcomes, in the form of decision or indecision enabling boards to become more effective in driving the strategy of the businesses they purportedly direct, through the board. This leads to the next two propositions:

P2: If sensemaking components are progressively engaged as negative sensegiving initiatives, the Chair needs to restore order through strong mediation.

P3: There is more chance the Chair can influence proceedings in open sensemaking opposed to encapsulated sensemaking, especially if he is a strong mediator.

Finally, I link the use of power play by powerful actors with sensemaking as already discussed:

P4: Powerful actors, who can pursue their intentions without the consent of other venture stakeholders, are less likely to receive sense from others than their less powerful counterparts during periods of encapsulated sensemaking.

P5: Powerful actors are more likely to receive sense from their less powerful counterparts during periods of open sensemaking.

I finally present the following consolidated sensemaking model in entrepreneurial ventures, as figure 7.4 below. In doing so, I relate faultline activation and strength to the promotion of sensemaking type and likelihood of decision-making; with consideration of the mediation skills of the Chair and his control of power game initiatives. This model pulls together the findings from all three of my empirical Chapters, and indicates the relationship of the components from the sensemaking trigger to the likelihood of a consensual decision. If a sensemaking trigger activates and strengthens a faultline, the

likelihood is encapsulated sensemaking will be the engaged process of the board directors, unless the Chair is able to mediate towards open sensemaking. If the Chair can sustain open sensemaking or abort power game initiatives, there is a greater likelihood of an outcome in the form of a consensual decision.

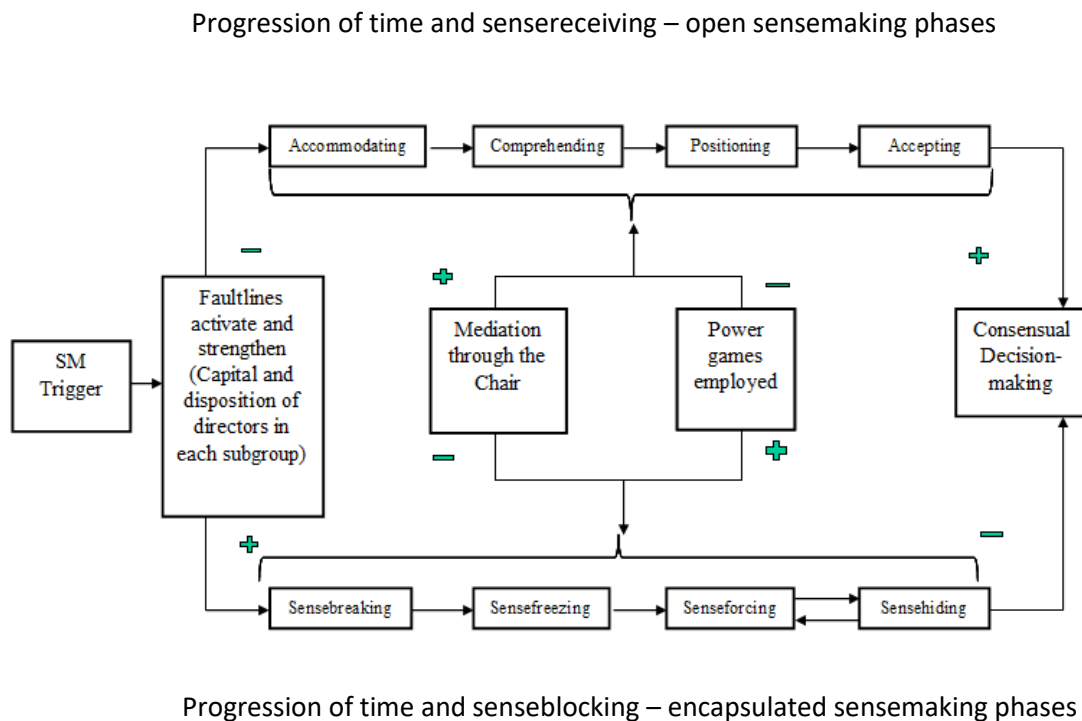


Figure 7.4: Consolidated sensemaking model in entrepreneurial ventures

7.4 Practical insights

“Success is not final, failure is not fatal;

It is the courage to continue that counts”

Winston Churchill

For the practitioner, hopefully the following practical insights will be useful in averting potential failure:

Firstly, concerted effort is needed to achieve open sensemaking in venture capital backed entrepreneurial ventures, where numerous narratives of the problem and differing

options of putative solutions are available to the board. Without active participation of the Chair in securing an environment of trust and free and frank debate, the default position in such contested sensemaking episodes appears to be that decisions, following adverse deviations, are unlikely to be swift and consensual. Such a concerted effort should be the role of all directors, as all directors have a legal responsibility to further the best interests of the company and its shareholders as a whole.

Secondly, the Chair can only assist in leading this effort if s/he is cognisant of open and encapsulated sensemaking, and the use of power game initiatives. The Chair needs to be aware specifically of sensebreaking as the data from my study indicates the potential of a strong Chair being able to mediate the board back to open sensemaking. If the actors are still accommodating (as seen in open sensemaking) prior to potential mistrust of board directors by other board directors, when there are numerous accounts of the sensemaking episode, encapsulated sensemaking may be avoided.

Thirdly, board composition matters and the value of allocentric board members is of value when the same actor can view a sensemaking episode through differing lenses. The presence of allocentric board members can weaken faultlines and generate a greater likelihood of consensual decision-making. Insufficient thought and design is frequently given to board composition. The social, economic and cultural capital of individual board members, along with their ability to exhibit an allocentric view is important; maybe a director is a trained medical doctor with a commercial training, who can view challenges through a medical or a commercial lens. This ability allows individual board members to align with more than one subgroup of directors, which allows for the expression of a problem in differing language and through a different professional lens (i.e. a medical doctor expressing a problem in commercial terms, without the use of medical terms, and also expressing the same problem in medical terms, without the use of commercial terms to board directors). One subgroup of directors may make sense of problems and

solutions through a technical lens, whilst a second subgroup may make sense commercially of the same problems and solutions. An allocentric director may be able to explain the problem and putative solutions to either subgroup, in their own language and professional etiquette, which is beneficial in the pursuit of a consensual decision.

Finally, investors and investor directors need to provide transparent advice to boards mitigating the risk of investor directors using power game initiatives to meet their own agenda. If investor directors resort to power game initiatives, the Chair should inform the investors of the entrepreneurial venture, and explain that such activity is not beneficial to reaching swift consensual decisions and increase the risk of venture failure.

The above findings have been suggested to several serving Chairs; the findings resonate with their experience and accord with their understanding of their problems on boards.

7.5 Further work

This study has limitations, due to being both contextually limited to entrepreneurial ventures and in employing qualitative research to deal with the research questions. Further contexts such as business angel investing and representation of angel investors on the entrepreneurial venture board need to be examined in order to ascertain whether generalization is possible. This study is limited to two subgroups, with the Chair belonging to either subgroup or outside both subgroups. Further subgroups need to be considered with larger numbers. The boards of the entrepreneurial ventures in my study all consist of a Chair and a CEO, which is traditional in European biotechnology companies. In the USA, the Chair and CEO often are the same person, and this could affect the interpretation of my study results, if attempting to apply the findings to American biotechnology companies. My study is limited to the consideration of three case studies in the same industry, which allows for comparison of patterns, at the expense of a more quantitative study with greater numbers of case studies from more industries. In the consideration of faultlines, I limit my analysis to the use of Bourdieu's theory of practice,

and its forms of capital. There may be alternate ways of considering faultline composition and subgroup formation. I have only considered limited influences on the sensemaking process in this context, relating to mediation by the Chair, particularly in controlling the input of powerful actors. These limitations pave the way for future work. I consider such further work by considering antecedents, the process of sensemaking and the outcomes in the form of decision-making.

7.5.1 Antecedents to sensemaking

Sensegiving and sensebreaking residuals have been identified as important determinants in employee sensemaking (Mantere, Schildt & Sillince 2012 193). Sensemaking and sensegiving residuals (the historical recollection by actors of the use of prior sensemaking and sensegiving) need to be further understood as antecedents to future sensemaking and sensegiving. Mantere, Schildt & Sillince (2012) call for further research on the acceptance and rejection of symbolic management, where sensegiving residuals *“may provide a cognitive explanation for the outcomes of sequential strategic changes, such as poor performance of firms that conduct multiple acquisitions in a short time span”* (192-193).

The relationship between group (board), subgroup and individual actor contribution to faultlines is still evolving. Most research is in the form of theoretical contributions and further empirical studies (similar to this study) would assist future theorizing especially as sensemaking is contextual and faultlines need to be observed also in context when the relationship to sensemaking is considered. The recent work of Healey, Vuori & Hodgkinson (2015) builds on the idea of faultlines in a theoretical context. Several of the cases used in this paper to illustrate their theorizing are centred around a team's cognitive composition where a subgroup of members possess negative implicit attitudes and a subgroup possess positive implicit attitudes. Future research may consider team members' spread more evenly and how much reflexive discordance is required to

attenuate reflective concordance and to undermine team performance. In terms of future work on faultlines, many of the suggestions proffered by Thatcher & Patel (2012) have not yet been fulfilled. They suggest that “*experimental and field studies to assess sensemaking in groups with faultlines are encouraged*” (993). My study is a limited empirical study which hopefully will pave the way for others to follow, as both sensemaking and faultline theory is not fully developed and further empirical studies should inform the theorizing. Triggers that activate faultlines need further investigating as they can be activated with little regard to sensemaking processes, although it is acknowledged from this study that certain types of sensemaking (encapsulated from this study) cause activated faultlines to strengthen and although I have demonstrated that capital and disposition act as building blocks to faultlines, I have not considered how and when faultlines are triggered.

In the assembly of subgroups whilst the actors attempt to sensemake, faultline formation is influenced and affected, both in terms of activation and strength. This study adds to this literature and has proffered relationships between sensemaking type and faultline activation and strength. Further work is also needed to understand the impact of positive and negative effects from the strengthening of faultlines. This would enhance the faultline literature that considers effects and triggers (e.g. Chrobot-Mason *et al.*, 2009; Jehn & Bezrukova, 2010; Thatcher & Patel, 2012).

In contrast to the findings of Lau & Murnighan (1998), where they suggest that shorter sensemaking processes may be promoted by strong and clear faultlines, I find that in the context of entrepreneurial ventures that the activation of strong faultlines are more likely to extend the duration of sensemaking processes due to a greater chance of encapsulated as opposed to open sensemaking. I suggest the presence of strong activated faultlines promoted by encapsulated sensemaking may prohibit the reversal of the process to open sensemaking, which assists the debate where Lim *et al.* suggest

that faultline strength will impact on a new venture team's interaction processes (2013 53).

7.5.2 The sensemaking process

Further work is needed to further elaborate the phases of both encapsulated and open sensemaking in this context and other contexts. More detail and understanding of each phase will inform the Chair so he can lead the board direction and understand the board dynamics assisting in more timely consensual decisions. This in turn should assist the aversion of failure when board dynamics play their part in being part of the problem and not the solution. My empirical data suggests the Chair can have a conscious mediation effect on the sensemaking process to affect differing outcomes, in the form of decision or indecision enabling boards to become more effective in driving the strategy of the businesses they purportedly direct, through the board. The findings of this study may be of use in promoting the leadership skills of the Chair of the board within entrepreneurial ventures. Knowledge of the composition and existence of faultline potential, and when faultlines are likely to strengthen, may assist the Chair in leading the board to make swift consensual decisions through open sensemaking. It may also help the Chair to steer the board away from the activation of strong competing subgroups of directors expressed through the activation of active and strong faultlines promoted by encapsulated sensemaking, which could lead to potentially irreversible encapsulated sensemaking with resultant delayed decision-making or no decision-making.

7.5.3 Influences on decision-making

There is an indication from the data that if the phase of encapsulated sensemaking does not extend beyond sensebreaking, there is the possibility with strong mediation from the Chair that encapsulated sensemaking can revert to open sensemaking. However further work is needed on this important mediation effect and the extent the Chair can be effective in mediation.

Drori & Ellis (2011) call for further research that *“may look at power games as informal mechanisms used to erode structures of control by bypassing or ignoring managerial decisions or curtailing managerial action”* (15). This study has gone some way in suggesting how sensegiving through power game initiatives contributes to ambiguity and how individual actors and subgroups of actors sensemake in that environment and some way in demonstrating how capital comes into play during encapsulated sensemaking. As this study looks at one industry only, further empirical contexts are needed to assist in generalizing the theory that actors could use sensegiving to better understand the mechanisms of power game initiatives as strategies for attempting to influence during sensemaking.

Although emotions and attitudes are outside the scope of this thesis, further work is needed in this important area: *“Perhaps the most worrying concern is the blatant conspiracy of silence that can plague a board and the need to work through the spread of emotions that bedevil open discussion. This is prised open by an act of courage, more often than that initiated by the Chair”* (Nada & Kakabadse, 2013 375-376).

Although sensemaking may never completely end, it does reach temporary resting points and Weick links such temporary resting points to reaching plausible accounts (Weick, 1995) and hence reducing equivocality. Such a position explains and personally resonates with observations from my study, where such temporary resting points are evidenced and may play a key role in determining when an account is deemed plausible. However, plausibility is not well scoped and the putative link between reaching plausible accounts during sensemaking and emotions needs further elaboration.

7.6 Concluding comments

Overall, I believe this thesis informs both theory and practice, concerning sensemaking in entrepreneurial ventures. More empirical studies are called for to critique the theory, which in turn assists to promote best practice in the board room. As observed in my study,

the constitution of the board and its subgroups need careful consideration, especially the appointment of the Chair, who needs to balance the views of all directors in leading the board to consensual decisions. In guiding the board to a healthy balance of debate and critique, power game initiatives need to be avoided and open sensemaking should be encouraged, which may be the difference between terminal failure or achieving success. I believe further consideration of board dynamics needs to be elevated up the research agenda to bridge the chasm between theory and practice in this critical area of business and management.

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Appendix 1

Glossary of significant terms

SENSEMAKING TERMINOLOGY

Sensemaking trigger and episode (Definitions used throughout this thesis)

A process prompted by violated expectations (Sensemaking trigger), that involves attending to bracketing cues in the environment, creating intersubjective meaning through cycles of interpretation and action and thereby enacting a more ordered environment from which further cues can be drawn (Sensemaking episode) (Maitlis & Christianson, 2014 11).

Open sensemaking

Open sensemaking occurs where there is little or no evidence of encapsulation (see below), where subgroups of actors interact freely with other subgroups in their search for meaning. The widely-held view that sensemaking is social, retrospective, grounded in identity, ongoing, enacted and seeking to reach plausible accounts (Weick, 1995) are characteristics which are all observed in open sensemaking.

Encapsulated sensemaking

Encapsulation is typically defined as “*the process whereby group members are kept separate from non-members*” (Pratt, 2000 473). When sensemaking is encapsulated, members engage with other members in the same subgroup to construct frameworks that they use to understand social stimuli. Social encapsulation follows directly on from the creation of strong in-group bonds as members come to spend increasing amounts of time in the presence of like-minded others at functions or at meetings (Pratt, 2000). Such encapsulation can provide protection by buffering members from other members who do not join or attack their sensemaking of the environment (Griel & Ruby, 1983).

Sensemaking components defined in the literature are as follows:

Sensemaking component	Definition
Sensebreaking	The destruction or breaking down of meaning (Pratt, 2000 464)
Sensedemanding	Strenuous efforts to acquire and process information so as to establish “a workable level of uncertainty” and equivocality (Weick, 1969 40; Vlaar, van Fenema, & Tiwari, 2008 240)
Sense exchanging	Different conceptions of organization are negotiated to socially construct the identity of an organization (Ran & Golden, 2011 421)
Sensegiving	Attempting to influence the sensemaking and meaning construction of others toward a preferred redefinition of organizational reality (Gioia & Chittipeddi, 1991 442)
Sensehiding	Discourse can be mobilizing in terms of promoting a specific kind of thinking and action or manipulative in terms of hiding particular ideas (Vaara & Monin, 2010 6) or silencing alternative senses of integration or marginalization of particular voices (Monin <i>et al.</i> , 2013 262)
Sense specification	Specification of explicit or implicit norms, coining of principles, exemplary decisions and actions, symbolization, and quantification (Monin <i>et al.</i> , 2013 262)

Sensemaking components defined from my empirical studies are as follows:

Within encapsulated sensemaking

Sensefreezing

I have sought to define this component from observations emerging from the data as
“Sensegiving efforts which knowingly or unknowingly prevent sensemaking and/or the search for meaning and associated action”

Senseforcing

I have sought to define this component from observations emerging from the data as
“Sensegiving efforts involving the use of power to influence the sensemaking of others”

Senseblocking

Defined from the empirical data as *“the use of collective sensegiving initiatives that are observed in encapsulated sensemaking inhibiting the restoration of order”*. The absence of senseblocking is sensereceiving, which is observed during open sensemaking.

Within open sensemaking

Accommodating phase

Unfettered debate between subgroups to understand the challenge and scope of the problem

Comprehending phase

Seeking an understanding of the component parts of the solution

Accepting phase

Agreement on the execution of an outcome through suggesting, discarding and reconciling information

Positioning phase

Debate in working towards a consensual solution and board resolution.

OUTCOMES FROM THE SENSEMAKING PROCESS

The specific sense or nonsense and the restored organisational activities, or further interrupted activities that ensue. The specific sense generated is seen as a springboard for the actions actors take to reinstate an interrupted activity (Sandberg & Tsoukas, 2015 S15).

Outcomes stem from either a unitary or multiple accounts as defined:

Unitary Account. Unitary accounts result from a systematic and controlled approach by giving and gathering constructions of the issue, which allowed them {in this study, the directors} to guide the numerous and varied views of multiple stakeholders into a single collective account. The new accounts generated through these processes tended to be cumulative and dense as leaders built upon, rather than tore down the accounts (Maitlis, 2005 36).

Multiple Accounts: Multiple accounts accumulate over time as stakeholders put forth more diverse accounts of situations that no one works to integrate. The multiple new accounts each of which tends to be quite narrow represent the construction of a single group {in this study, the board} (Maitlis, 2005 38-39).

Decision-making

Consensual decision

A decision arrived at by agreement with all board members

Forced decision

A decision arrived at through some directors not agreeing with the decision but did not have the power, influence or willingness to overturn the decision

Indecision/no decision

The inability of the board to reach a decision

OTHER IMPORTANT DEFINITIONS USED IN THIS STUDY

Adverse deviation

When external investors buy equity in a business, the entrepreneurial managers often have to provide assurances by warranting certain statements, i.e. that the intellectual property is owned by the company or certain financial statements are reasonably stated, resulting in a warranted business plan. Although there were many minor deviations, adverse deviations in the context of this study are events triggered by a serious diversion from plan that may, if not acted on, result in the terminal failure of the entrepreneurial venture. Such a trigger is identifiable by the investor directors and often definitions of adverse deviations are defined in the subscription agreement. Examples may be 20% drop in sales target or missing the profit target by 10% in the year end audited accounts, but specific to each venture.

Dominant frame

An agreed narrative that “*shapes how the problem and solution are defined, and thus which strategic choice is made; conversely where no frames resonate enough to mobilize action around it, frames remained divergent, activities unresolved and the decision deferred*” (Kaplan, 2008 736).

Bourdieu's form of Capital

Bourdieu's forms of capital are defined (Bourdieu, 1986) as follows:

Economic Capital

Economic capital is expressed as power through property rights. Within the context of entrepreneurial ventures, economic capital is often expressed by the degree to which an actor has rights of control through equity ownership, or through the representation of an owner. Actors' ownership of other investments also adds to economic capital.

Cultural Capital

Cultural capital is expressed as the area of expertise possessed by each actor. Within the context of entrepreneurial ventures, actors' educational background and their experience in the position that they have taken in the entrepreneurial venture are of relevance. Additional experience that may assist in understanding the roles of other actors is also considered.

Social Capital

Social capital is expressed as the quality of relationships that span the different domains of expertise. The diversity of social capital enables actors to appreciate other actors' perspectives.

Dispositions

Dispositions are enduring ways of observing and believing and exist mainly at the unconscious level (Bourdieu & Wacquant, 1992). Influences are filtered through the actor's social positions, including dispositions in the form of egocentric or role-centric behaviour, or behaviour that results in a disposition to think about others and to behave in relation to them, which is viewed as allocentrism (Bourdieu & Wacquant, 1992).

Allocentrism

Allocentrism is the movement away from the natural egocentrism of the individual and results in a disposition to think about others and to behave in relation to them.

Allocentrism manifests itself in terms of movement from self-centred to decentered states on social, affective, moral, relational and cognitive dimensions (Thornberry, 1997).

APPENDIX 2

This appendix includes the final interview protocol and a sample interview transcript, where permission has been given by the interviewee for inclusion in the thesis, but with names of individuals and companies changed or removed.

INTERVIEW PROTOCOL

ETHICAL CONSIDERATIONS

1. All data will be anonymised, kept confidential and pooled. The purpose of the research to be communicated to the interviewee.
2. Obtain the permission of the interviewee to perform the interview and subsequent pooled use of the data.

INTERVIEW OUTLINE

IDENTIFICATION OF FAILURE (ADVERSE EVENT TRIGGER)

Have you been able to identify one or more failure events from the history of the company?

Why do you deem that event a failure event?

Did others deem the event a failure event?

What was the % equity split of the company?

What was the board constitution?

Was there a subscription agreement in place with consent required from investors for specific activity?

If so, were the consents onerous and unduly restrictive on the executive directors operating the company?

If represented on the board, was/were the investor director/s helpful ?

If represented on the board, did the investor director/s always act in the best interests of all shareholders at all times?

Could the failure event be identified as an adverse deviation from a warranted business plan?

What triggered the identification of the failure event?

Was the failure event isolated or part of a larger number of failure events?

Was there a stream of potential antecedents to the failure event?

Did the flow of action become less intelligible before or during the failure event?

What was the magnitude of the failure event?

EXAMINATION OF THE FAILURE EVENT (ADVERSE EVENT)

Would you tell the story of events that led to the failure and subsequent events post failure that relate to the failure?

Was blame and/or praise attributed to any party involved?

Did the power dynamics between varying parties affect the failure?

How did the board members relate to each other and to management?

Did such power dynamics change during and/or after the failure?

Did key people take ownership of the failure during or after the failure?

Were roles and responsibilities clear throughout the event?

What attributes/disabilities were demonstrated by varying parties? (i.e. tenacity, overconfidence, perseverance *etc.*)

Were narrated versions of the failure aligned across all parties?

Was denial of the event apparent among any of the parties?

Did this failure event predate further failure events that may have been associated with this event?

RECTIFICATION OF THE FAILURE EVENT

What steps were taken to correct the failure?

Were any lessons learnt from the failure?

Was anything done differently due to the failure?

Were any changes embraced by all parties?

Were new objectives/goals set or were the original objectives/goals still in place after the failure?

Were tools available to assist failure leading to success i.e. product reproofing, therapeutic area re-designation, dose ranging change etc?

Sample Interview Transcript WS650038 March 17th, 2012

So this is xxxx. xxxx it's fair to say that you are a seasoned executive within the life science industry. Just to state before we commence the interview that the interview is being conducted under the ethics of the University of Warwick, no confidential information you give me will be used. I am only looking for themes and I shall pool the data with other data. Is that an acceptable ethical stance to take for this interview?

Yes that's fine.

So first of all have you been able to identify a failure event within the history of a life science company that you have been involved with?

Yes

Could you add a little bit of colour to the event?

So it was the failure of a phase three clinical trial of the lead compound. So basically the clinical trial failed to reach its statistically relevant end point that resulted in the company shutting down their research operations making the majority of the staff redundant and just turned it into a shell company.

And it's pretty obvious why that's deemed a failure event, but did all parties deem this a failure event or were there any people that deemed it not such?

No, I think it was very clear that the compound was the lead compound, and there wasn't a later stage of development that was significant as far as the investors were concerned. The clinical trial was pretty definitive. It gave us results so yes, I think it was agreed that it was obvious that all parties agreed it was a failure event, as defined as an adverse deviation from plan.

What was the % equity split of the company?

The management team held between 20 and 25%, the University 30% and the investors in total the balance.

What was the board constitution?

Three members of the management team, two investor directors and an independent Chair.

Was there a subscription agreement in place with consent required from investors for specific activity?

Yes, there was a lengthy subscription agreement, that once signed, no-one ever referred to.

If so, were the consents onerous and unduly restrictive on the executive directors operating the company?

Absolutely, we could not spend more than £10,000 capital for example, and could not sign any contracts, whether deemed material or otherwise.

If represented on the board, was/were the investor director/s helpful ?

If they got their own way, otherwise they would play all sorts of tricks.

If represented on the board, did the investor director/s always act in the best interests of all shareholders at all times?

No, I actually think it is almost impossible; certainly improbable that investor directors always act in the best interest of all shareholders at all times. They are appointed by the investor and hence I am sure that is where their first loyalty lies.

So the failure event was obviously an adverse deviation from a warranted business plan by definition. But what triggered the identification of the event, was it purely the un-blinding of data?

Yes it was the results of the study, the un-blinding of the data and the analysis of the results.

And this event was isolated and wasn't part of a larger number of events. Could you say something about whether it was unexpected then?

I think it was always accepted that there was a level of risk involved in pushing the product forward, so I think the level of risk was probably viewed differently by different people in the organisation. But I think there was always a level of risk associated with the product in a clinical trial

Just going back to when the results were un-blinded, did the flow of action become less intelligible after this event or was it still a company where intelligible or intelligent flow of action occurred? Was there a change in the flow of action at all?

I don't know if there was a plan for failure. There probably was at the highest level of the company, but that certainly wasn't visible to the senior management team that I was a

part of, it wasn't visible. But I think there was a clear plan that was followed. There were discussions with investors, discussions with potential partners, and there was a clear plan that was followed.

So this was a phase three clinical trial. One would expect that certainly there would be a view that there was an acceptable risk at this stage for the compound to be developed?

Yes, but I think the risk profile is different for a biotech company with a single product or with a lead product, compared with other companies who have multiple products in their portfolio. There is maybe a higher level of risk which was acceptable in that situation.

And do you think that's accepted by the investors in this industry as a norm or do you think there is further education to be done?

I think the investors do realise that biotech's are a high risk but also a high return concept. I think they are fairly accepting of that.

Was the fallout of this failure event quite severe in monetary terms, emotional terms or in any other aspect?

Yes, it was quite severe for the whole company because basically every member of staff was made redundant so it had a huge impact on the company and the staff.

Just around the redundancy event, was that done as one procedure or was it done by several cuts? In other words, was it just done as one process, or did it take a number of months, and it was done through several different processes?

It was one clear process, because of the number of staff involved; it took three to four months before the first people were actually leaving the company, and three to four

months following the announcement. So it took a period of time to be completed but it was one defined process.

And was any blame or praise attributed to any party involved?

There were certainly requests made concerning the running of the clinical trial, the management and the monitoring of the clinical trial to ensure that it had been done properly, that it had been designed properly and that no errors had occurred in that process. There was an external independent review and nothing untoward was found, the trial was managed and run correctly. So I think people were praised because of the way the trial had been run and managed and it was clear that the failure was because of the compounds lack of efficacy rather than any management failure.

Did you see any change in power dynamics moving through the process, between investors and yourselves, or within the management team or from any other external source?

Yes, I think following the event, the CEO and the executive directors were very much out of the driving seat, and before the event, the CEO and the executive directors were very much leading the company and had very clear leadership. After the event, things did change and the investors were getting more involved and it seemed to be them that were calling the shots more than the executive team.

And during this time did the board members relate to each other and to management in a cohesive way, or did you feel that that change in power dynamic affected the way the management acted to staff?

I think probably there was a change because it was felt by the staff that the senior management were no longer in control, they had lost some of their power to a certain extent.

So that affected to some extent influencing skills and the direction and operational way of managing the company?

Yes, I think staff had lost some confidence in the leadership team.

Did the power dynamics change after the failure? Was there a stage where everybody knew the writing was on the wall so effectively there came a day when it was almost accepted, how did that play out?

Yes, I think once the results had been viewed and it was clear what the plan was there was just an acceptance that it was going to happen. There was nothing that could be done to stop the redundancies and close down operations, so there was just acceptance of that.

Did key people take ownership of the failure during or after the failure?

I am not sure I could say they took ownership of it. They certainly accepted that people accepted responsibility because it's not correct to say that any one person was responsible, but they accepted the process.

And were roles and responsibilities clear throughout the event?

Yes, I think it was clear what people had to do, what the responsibilities were and they carried them out.

What attributes were demonstrated by varying parties?

I think that the management team was certainly sympathetic to the workforce.

And how was that demonstrated?

I think by trying to put procedures in place to assist the workforce to find alternative employment, so that people were aware of what other positions were available. Where possible, if contracts were extended from other companies, these contracts were offered to people in the team. And I think support in looking for other positions was a key part of this sympathy.

And were narrated versions of this failure by aligned across all parties? In other words if I had the privilege of speaking to all parties, from your point of view, would you deem that they would all give the same version of events?

I don't know. I think some parties may give different versions of events, and some people may have felt probably more anxious about the failure. I think some people in the organisation were fully aware of the level of risk involved and others may not have been.

Was there any denial, or would you deem that there would be any denial of the event at any time among any of the parties?

No, I think it was pretty clear what had happened and what the result was.

Could you just paint a picture of this company in terms of whether it was a floated company, what the board looked like, that kind of colour around it, then I can link it with other examples of the same type of company?

It was a company that was a spin out from the University, the CEO was a professor from the University, and there were executive directors who did have significant experience of the pharmaceutical industry. The non-executives, there was certainly a good proportion of the non-executives who were experienced in pharma development.

And was this a quoted company on the UK markets or did it have any US shareholders?

Yes, it was on the London stock exchange and no US shareholders as far as I recollect.

And in terms of board constitution, one would imagine as it was a public company that the board would be non-executive who were the great and the good of the industry and the rest were management, is that true?

That's correct, yes.

In terms of this event, it was a terminal event. Do you think any lessons were learnt from it?

I think certainly the individuals will have learnt a lesson, so in other positions and in other companies, they can use these lessons about levels of acceptable risk in moving products forward.

And do you think these people when they move to other companies, would they do anything differently due to that learning?

I think depending on the type of company yes, the level of risk involved in development and the level of acceptable risk in changes depending on the type of company profile.

Can you think of maybe one or two examples of the type of thing that might have been done differently due to this experience?

I think there are some key decision points where it has been agreed up front on earlier trials and maybe some harder decisions: whether to go into development earlier may have been taken.

So when you say harder, you are alluding to the fact that maybe within the industry it might be useful to terminate trials earlier which are deemed too high a risk, opposed to continuing to inject the money into other projects in the same company. Would that be fair, something like that?

Yes, and I think having agreed success and failure criteria upfront and sticking to those criteria would probably help a lot as well.

That's very interesting, do you think that is quite easy to define upfront?

I don't think it's easy, but I think it's possible to do.

So do you think there is a need because of the higher risk in these type of companies to do more contingency planning, or do you think in a way it's just a fact of life of these type of companies?

Yes, I think it is a fact of life, but I think it's very difficult to have detailed planning in place and detailed planning available to the whole organisation where that plan is basically that we are closing down the organisation and we are making everyone redundant. That is not a plan you can share with the whole organisation.

Are there any tools available to assist failure leading to success, and you have just alluded to one, can you possibly add a little bit of colour as to what your thoughts are on that?

Sorry?

Could there be any tools available to companies to assist failure either leading to success, for example product reproofing, therapeutic re-designation, those kind

of things; and from your experiential viewpoint, what tools could be available in this instance that would have given the company more chance to survive?

I think probably trying to get as much information as possible earlier on in the development programme. Having more commercial awareness of what would be acceptable or what would be an acceptable product to profile.

If this was a large blue chip pharma, they would have a lot of staff and a lot of resource to do these types of things. But I guess with smaller companies they are certainly resource limited. Do you think that's quite a challenge to actually do what you suggest with the resources they tend to have, or do you think it's something that should be insisted on?

I think that is a challenge, it's a lack of specialist resource which is available within the company which is always an issue.

Is there anything else you want to add in relation to what's been said?

No

INTERVIEW FINISHES

